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FARM AND FIRESIDE

The National Farm Magazine

JULY 1918 5¢ A COPY

Bagging a Hun Over London—By Sergeant-Pilot Lamb

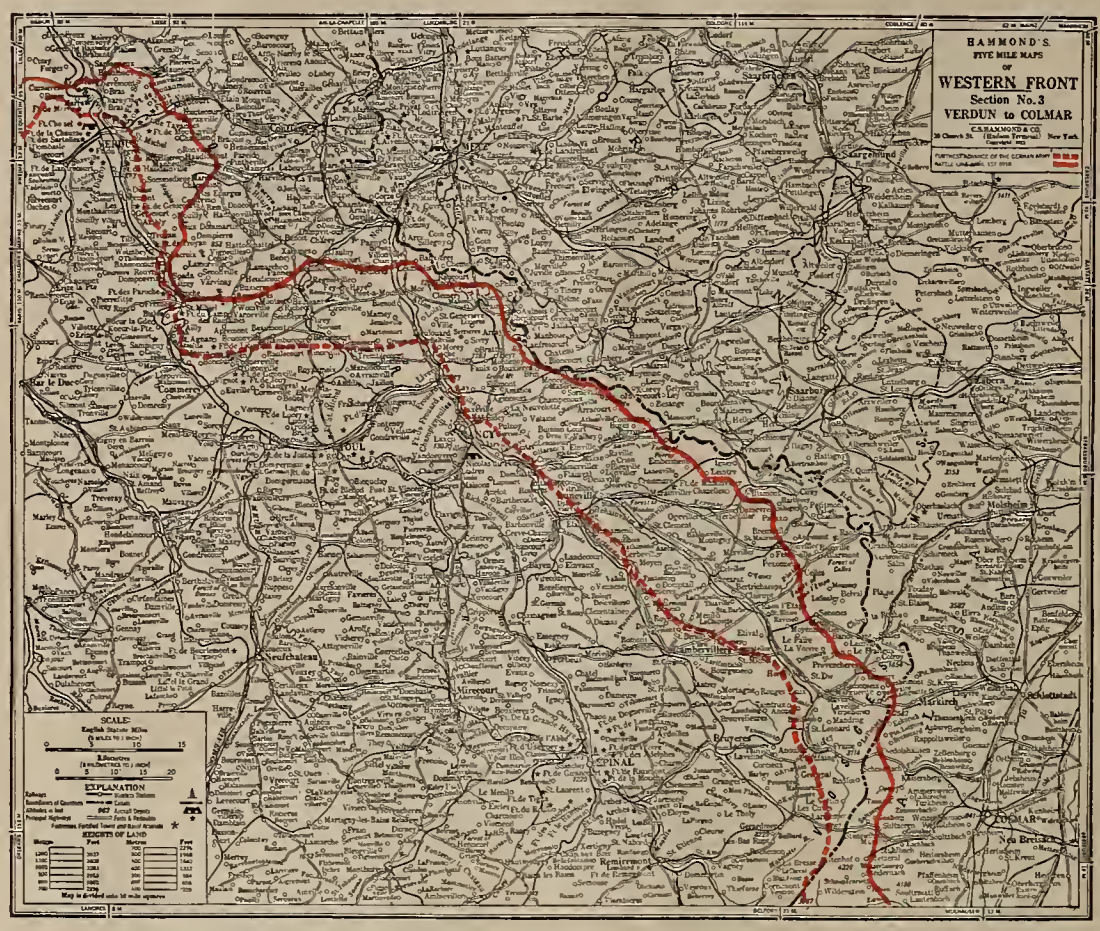
Where Our "Sammies" Hold the Line

"OVER there" in France, our American boys are holding long stretches of the battle line against the "Huns." In conjunction with their French, British and Belgian comrades, they are giving up their lives in the great cause of humanity. The small map below indicates a portion of the Western front where many thousands of "Sammies" "hold the line."

Facing the Enemy on Every Front

IT is not only in the Toul sector that the Americans are making themselves felt, however. They are fighting in their own dashing, brilliant way *on every front* and as the days and weeks slip away, more and still more of them will take their places in the lines and *ultimately* our boys in khaki will drive the German legions out of France, out of Belgium and out of the lives of the peoples of the world, forever.

The map to the right is a reduction of a four-color, 20 x 24 inch map constituting two pages of our new Battle Front Atlas.



Know What Our Boys Are Facing

SO that you may understand the things our boys are facing, so that you may follow them "over the top" and into the lines of the enemy, we have prepared a new down-to-the-minute Atlas of the Battle Fronts. It contains large-scale maps of the Franco-Belgian, American and Italian battle lines, showing in minute detail all the towns, villages, forts, wireless stations, railways and battle lines from the English Channel to Switzerland, in France, and from Switzerland to the Austrian border, in Italy. Then there is a wonderful 20 x 24 inch four-color map, 5 miles to the inch, of the "American Sector" below Verdun.

You Can Have Your Copy of This Book with Farm and Fireside One Year for Only 50 Cents

The big maps of the battle fronts are in four colors. They are drawn to a scale of ten miles to one inch. They show in minute detail the positions occupied by the opposing armies; woods, elevations, battle lines of the past and present, and the ground lost and won are all clearly defined. The recent actions in Picardy and on the Italian front are also shown.

You Can Get a Copy Without Money

If you prefer to do a little easy work for us and earn your Atlas, we have an excellent plan for you.

See two of your friends and get them to order *Farm and Fireside* for one year at 25c each; send us the names and the 50 cents and your name as *club-raiser* and we will send *you* a copy of the Atlas postpaid for your services.

Still another way is to get *one* friend to order *Farm and Fireside* at 25c for a year and then send this subscription and your own, thus making up your club of two.

F. F. 149

Battle Front Atlas Coupon

FARM AND FIRESIDE
Springfield, Ohio

Gentlemen: I want to know more about the battle fronts in France and Italy. Please send me your big "Battle Front Atlas" postpaid and also send *Farm and Fireside* one more year. I enclose 50 cents.

Name .....

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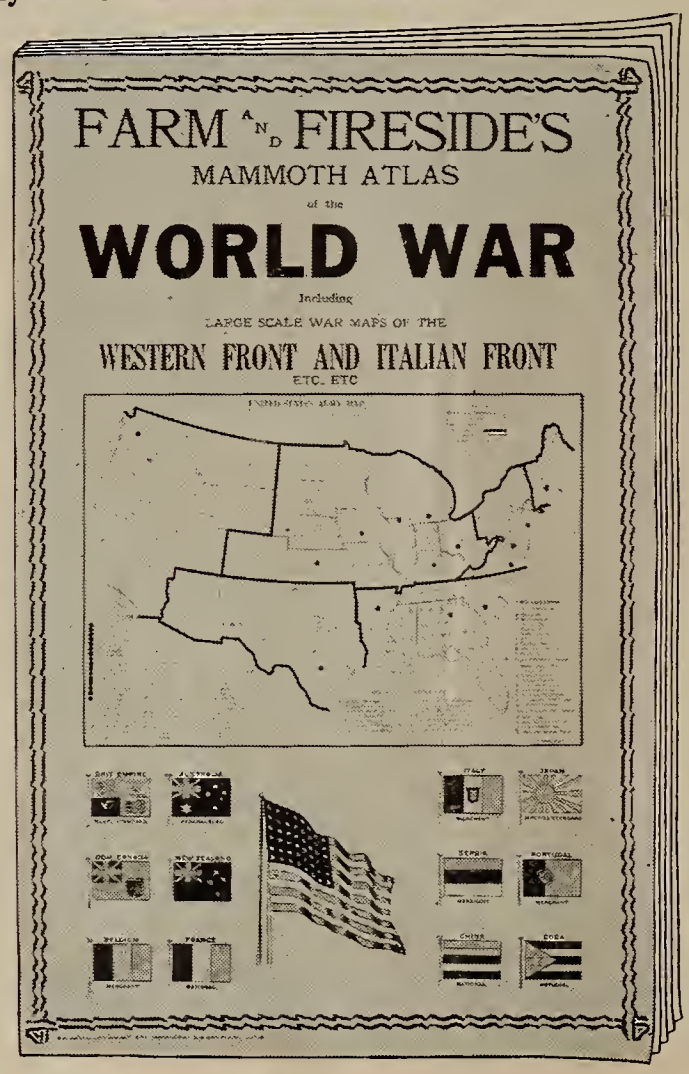
NOTE—If your subscription has already been paid ahead you can send your order for the Atlas and your new subscription will be added to your old one. If you want to earn the Atlas by sending a club of subscriptions, write the names on a separate sheet and pin this coupon to it.

Get Your Scissors! Clip the Coupon Now!



Additional Features of the Atlas Are

1—Map of United States showing all National Army Cantonments—National Guard Camps—Officers Training Camps, Aviation Fields and Special Army Schools.

2—Flags of Allied Nations in natural colors.

3—A big, six-color, 12¾ x 20 inch map of the world, showing colonial possessions with color key.

4—Big double-spread map of the sector of the battle front held by American soldiers. This map has just been engraved and gives a wealth of detailed information about the country in which our boys are fighting.

5—A Gazetteer for all the battle fronts, giving names and pronunciation of practically all the cities, towns, villages and places that are now, or are likely to be, within the battle lines.

6—A full-page map of Central and Western Europe.

7—A smaller map of Europe and surrounding waters showing the German Submarine Barred Zones in the Atlantic and Arctic Oceans and in the Mediterranean Sea.

8—A beautifully engraved map of Asia Minor, Asiatic Turkey and the sections of the Holy Land in which the British are campaigning.

9—Insignia of rank—United States Army and Navy. Hat cords, collar marks, chevrons and all rating and service insignia, illustrated. A little study will enable you to place Army and Navy men by their markings.

Clip the Coupon NOW Before You Lay This Aside

The illustration above shows the Atlas in only one color and of course does not do it justice. The flags are all in natural colors, and the red, white and blue predominates, as it should.

Send all orders to

FARM AND FIRESIDE Springfield, Ohio

Published Monthly by
The Crowell Publishing Company
George D. Buckley, *President*
Lee W. Maxwell, *First Vice President*
Thomas H. Beck, *Second Vice President*
Albert E. Winger, *Treasurer*
L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Volume 42 JULY, 1918 Number 7

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Alden Peirson, *Art Editor*

Editorial Offices, Springfield, Ohio. Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at the Springfield Post Office as Second-Class Matter.

By subscription, 25 cents a year; three years, 60 cents; or five years, $1.00. Single copies, 5 cents.

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Bagging a Hun Over London

When a minute's a million years: My thrilling experience in a running fight with 31 German Gothas three miles above the second largest city in the world

By Sergeant-Pilot Dean Lamb

UNTIL last spring I was a member of the Thirteenth Squadron of the Royal Flying Corps, stationed on the western front in France. As it happened, I was lucky enough to be one of the few non-commissioned officers flying as pilots in the British Air Service. The Australian commander of my section did not share the common British prejudice against non-com pilots, and so I was given plenty of chances to fly.

During my enlistment abroad I was credited with seven German machines, although I frankly admit that I am only sure of two, the others having "nose-dived" or "spun" down as the British communiques so often say, "forced down in their own territory out of control." It was in bagging the last German machine that my observer was killed and I was wounded.

After sixteen months of continual active service, in which I had averaged more than 240 hours of actual flying, and had seen my fellow members of the section, one after another, disabled, killed, wounded, or "missing," the strain began to tell on me.

I couldn't have stuck it out much longer, and I guess my commander knew it, because after I was brought down by our own "Archies"—anti-aircraft guns—I was detailed to the Nineteenth Reserve Squadron, which was at that time a part of the air forces assigned to the defense of London.

In those days the average life of an air pilot on the western front was about 200 hours of flying. I knew it, but I was a fatalist in those days—all of us were—and it was rather a surprise to me when I finally landed in London to do what I thought was a "soft snap." But it didn't pan out that way.

I knew a chap who flew more than 300 hours of the worst kind of flying, and never got a scratch. When he went back to England on a few days' furlough he stepped in front of a train and was killed. I have always been afraid that I might die that way, or be shut up in a folding bed and suffocate.

The headquarters of the Air Board of London at that time was Adastral House on the Thames Embankment. There were scores of aërodromes scattered around the outskirts of the city. Each of these aërodromes kept a plane in the air day and night. The machines worked in shifts of two and three hours each. A pilot went up, and stayed up until he saw another machine with the number of his station on it. Then he knew he was relieved and could come down.

When I was on duty early last summer, most of the outfits on the patrol were the old BE 12's, 140-horsepower single-seaters. They had a speed of 75 miles an hour and carried one machine gun that was timed to shoot through the propeller. This gun was aimed by pointing the plane in the direction the gun was to be fired. Against the new, powerful, fast German Gothas those "buses" were nothing but death traps.

At that time most of the real fighting machines of the newer models were being sent to the western front, so they couldn't spare much of anything for the protection of London. Perhaps they reasoned that we fellows couldn't do much against the Hun anyway, and, in my case, possibly they figured that I was small loss.

But, luckily for me, I flew a DH 4 over London, one of the most powerful machines in existence at that time. It could do about 137 miles an hour, had a 360-horsepower Rolls engine, mounted two Vickers machine guns in front of the pilot, firing simultaneously through the propeller, and had a seat behind for a gunner, with a Lewis machine gun that could be trained behind or overhead.

Dressed in his leather flying togs, Mr. Lamb is ready for a flight in a fast fighting plane

It was a very good fighting machine, but was too fast to fly at night. In the dark it is not safe to try to make a landing with anything that flies at that speed. For night flying the BE 12's were ideal, only, as I've said, they hadn't a show against the Gotha. My DH 4 was the only machine I saw of that type in the air on July 7th, although I dare say they have a lot more of them in use in that patrol now.

The German Gotha operated by a skilled pilot is a very dangerous machine to fight. It is an adoption of and an improvement upon the British Handley-Page plane. A British pilot, thinking he was behind the British lines, landed in a Handley-Page machine in the German aërodrome at Lille, France, in May, 1916. This was the first time the Huns had ever seen one of the new Handley-Page machines, and they hastened to improve it to keep pace with the English.

The Gothas in use last summer had a wing spread of about 87 feet; they carried two Mercedes engines, each of about 410 horsepower, driving pusher propellers. In this respect they differed from the Handley-Page and most other machines, which are tractors, having puller propellers. Each Gotha carried three men and three guns, in addition to 800 pounds of bombs in a rack forward of the rear gunner and behind and underneath the pilot. The pilot released the bombs. They could do about 80 miles an hour. Lately their fuselages, the car in which the pilot and gunners sit, have been built semi-armored, and the pilot and gunners have worn body armor and steel helmets thick enough to ward off shrapnel.

The distinguishing characteristic of the Gothas, when I was flying, was a rear gun tunnel which enabled them to fire not only rearward but also underneath. I had always believed that when behind and below an enemy machine I was comparatively safe from machine-gun fire. I was fooled that day. I didn't know about the tunnel stern, and it was the cause of my undoing.

Now, in addition to the machines on duty out of each London aërodrome each day, there were a certain number of machines kept in reserve, primed for action. These planes went out only on order. Like a fire department, they were always ready for action. The motors were turned over every morning to warm them up, the tanks were kept filled, cartridge belts were handy in the guns, and spare ammunition was always aboard.

The flying clothes of the crew hung on the fuselage at all times, just like a fireman hangs his rubber coat ready for the clang of the gong. To begin a flight it was only necessary to start the engine and have the mechanicians pull away the chocks from the wheels.

At 10:45 o'clock on the morning of July 7th we got this preliminary warning bulletin from Adastral House: "Take air-raid action and notify all machines in air."

That meant to place a large H in the center of the aërodrome as a signal to any unarmed training machines that might be up to come down to within 3,000 feet of the ground and be prepared to take cover in case the Germans should appear.

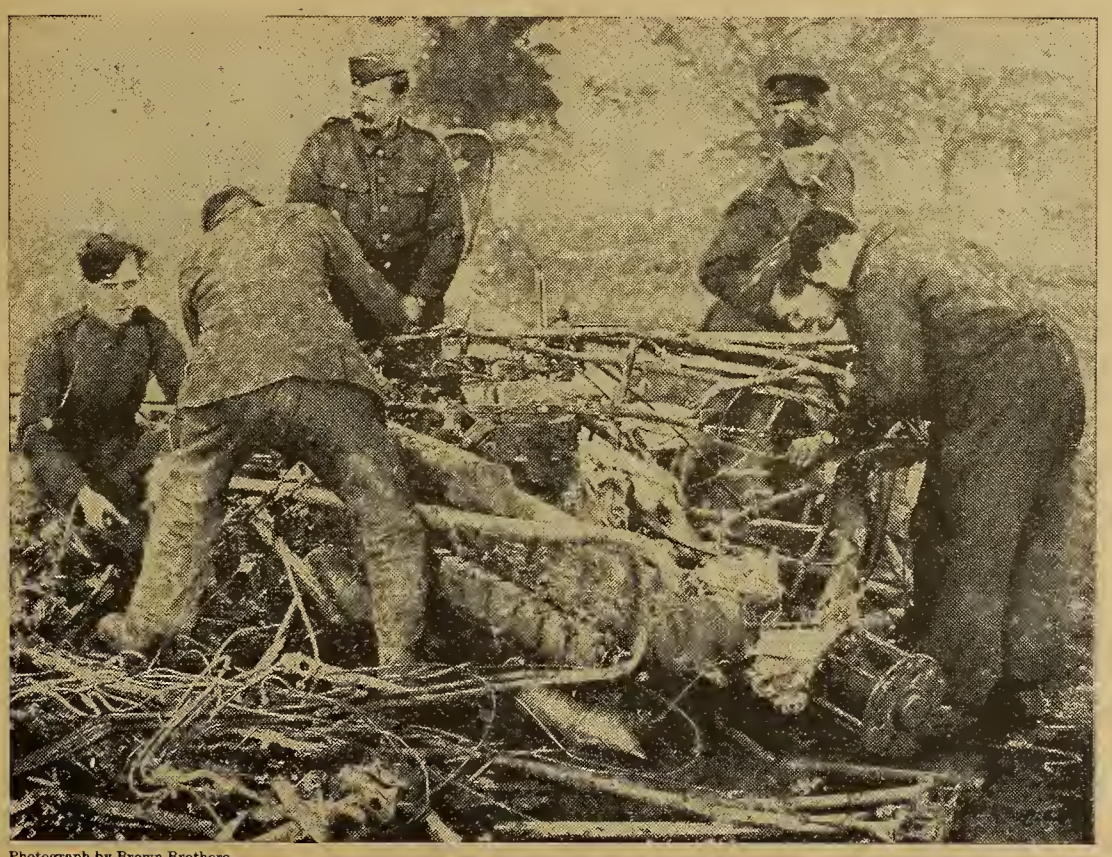
When we got the message I called my gunner, Dave Low, a Scotchman, and we slipped into our flying clothes and climbed into the fuselage of the bus. Soon the major came running up and handed me the second message. It read:

"Large formation of hostile aircraft reported from east coast."

I remember the major's words as if they were spoken yesterday. As I handed back the order he said: "There you are, boy. You are to fly to Hendon for further instructions."

"Is that all?" I asked.

"Yes," [CONTINUED ON PAGE 22]



Photograph by Brown Brothers

English aviators examining the ruins of a German Gotha shot down from a height of three miles during a raid on London

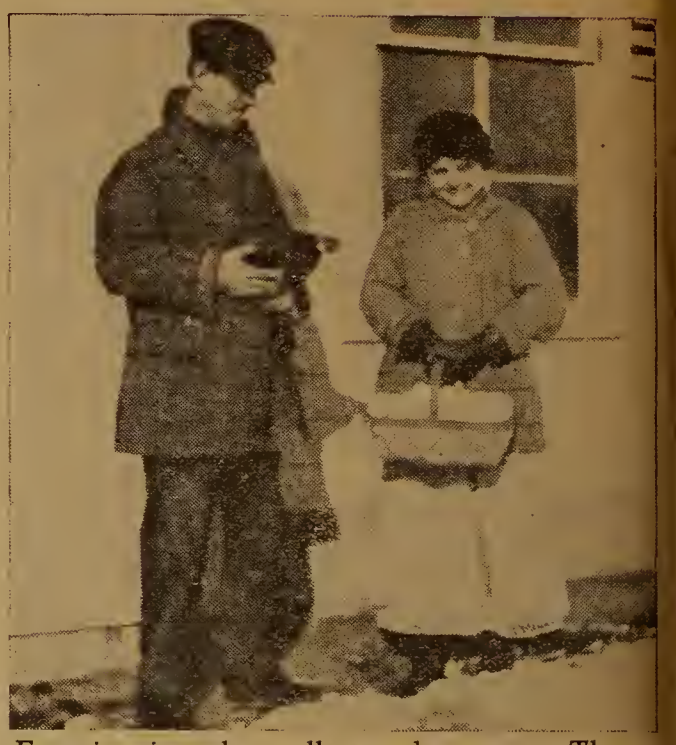
Ten Acres and a Living

She was young, popular, and had been reared in the city. Everybody laughed when she decided to farm—but that was four years ago

By Alice Mary Kimball

A typewritten letter, mailed promptly, sells Mrs. Tupper's products at fancy prices

The idea of a home, a job, and a living materialized into a modern bungalow on a 10-acre farm



Even in winter her pullets make money. These eggs sold for 70 cents a dozen last January

WHEN she decided to be a farmer everybody laughed. She was young, popular, unusually fond of frocks and fun. She had been reared in the city. She didn't know a Jersey from a Hereford, or a Wyandotte from a Plymouth Rock.

"You'll be back in six months," her friends said.

Four years have passed. Mrs. Charles S. Tupper still is "buried" in the country. Moreover, she is supplying eggs, chickens, honey, and home-canned goods to those of her former associates who are willing to pay for quality.

"Farming," said Mrs. Tupper, "is the ideal vocation for the woman who feels the modern desire for a job and the need of marriage and a home.

"I never wanted a job so keenly as when I found myself in a small city apartment without enough to do to keep me busy. After I'd swept and dusted and prepared meals for two, I had hours of time on my hands. The corner bakeshop, the laundry, and modern conveniences had thrust upon me more leisure than I could use. Mr. Tupper is a young engineer whose work takes him to various parts of the Southwest. In his absence I felt strongly the need of filling up my idle hours in some interesting, useful way.

"I didn't quite like the idea of spending all my spare time on cards, calling, women's clubs, and social pleasures. I longed to be a real partner to my husband and to share in making the family income as well as spending it.

"We had a few thousand saved for a home, and were trying to decide where to build. One day it flashed upon me: 'Why invest in city property? Why not a little farm? Then we'll have a home; I'll have a job, and can make our living'."

The idea materialized into a modern bungalow on a 10-acre farm in Westdale, Missouri, an hour's drive from Kansas City. Mr. Tupper's salary furnished working capital for the enterprise and Mrs. Tupper has found congenial work as farmer-in-chief.

Poultry, bees, and a vegetable garden are Mrs. Tupper's specialties. Her side lines are a pig and a registered Jersey cow. She looks after the poultry, works in garden and apiary, and milks the cow herself. She employs very little help.

"It wasn't difficult to get a start in learning to farm," Mrs. Tupper explained. "I visited farms and studied the methods of farmers and their wives. I asked lots of questions.

"I didn't have any old fogyisms to unlearn, and I didn't acquire any. I went straight to the agricultural college and the state poultry experiment station for instructions. While I was living in the country supervising the building of the bungalow, I read and digested every bulletin I could get. I'm still studying bulletins. I subscribe for several farm papers and a bee journal.

"Of course, I learned a great deal from the practical experience of the people about me, but I checked up everything to the rules and directions of government and state agricultural experts, which may be had for the price of a postage stamp. I tried to take orders intelligently. I ignored old rules for poultry and bee-keeping."

Mrs. Tupper's chickens are hatched in incubators, hovered in a coal-heated brooder house, fed according to experiment-station directions, and reared in poultry houses built from experiment-station designs. From the first they have been practically free from lice and disease. She gets winter eggs. Even in zero weather and fed present costly feed, her spring pullets more than pay their way.

"Bees responded as readily to proper treatment," she said. "My second season I harvested $265 worth of comb honey from twenty working swarms. And I was stung not a half-dozen times at that."

Some of Mrs. Tupper's neighbors were inclined to joke at first at her appetite for bulletins, her belief in experts, and her rigid insistence on pure-bred stock and poultry. They admit now that her faith has been justified.

If Mrs. Tupper had trod in the well-worn neighborhood ruts, she would have marketed her produce by the country-store-commission-man-retailer-consumer route; but again she did not. From the first she planned to plug the leakage of farm profits in middlemen's commissions. When she had anything to sell she put on a good-looking tailored suit, a becoming hat, smart shoes and gloves, and went to the city to talk to ultimate consumers.

The consciousness of being dressed appropriately—not expensively or ornately—is a valuable aid to the farm saleswoman, Mrs. Tupper thinks.

"If a salesman comes to me shabbily dressed or flashily dressed, I can't give him a fair hearing," she said. "I may let him talk on, but I decide against him the instant I look at him. So I reasoned that a trim, pleasing appearance would be as valuable an asset to me as to the men who sell pickles, insurance, or gilt-edged bonds. It would mean a favorable first impression and open the way to show samples and make a sales talk.

"If I tried to interview a prospective customer handicapped by the consciousness that my skirt hung badly or that my shoes were shabby, not only would I be timid and ill at ease, but my appearance would suggest to the city buyer the very slipshodness and lack of reliability he fears in buying direct from the farm.

"I go strong on attractive samples. It would be useless to try for fancy prices if I brought honey to town in mean-looking cases or rusty cans. A slight drip down the side of a package might not be proof positive of poor quality, but it would frighten away a careful buyer. Likewise, I do not illustrate my egg sales talks with a sample dozen of odd sizes and shapes. It is needless to add that goods delivered to customers must be of the same quality and appearance as the samples, and that one must keep one's promises to the dot. A little well-directed enterprise will land a customer, but only good service can hold him."

When the current wholesale price of honey was $3 a case, Mrs. Tupper's comb honey has been in demand at from 20 to 30 cents a pound. She disposes of every pound to private customers and to one grocery store which caters to "fancy" trade. She sells eggs from her 400 Anconas at from 4 to 6 cents more a dozen than the country store is paying its patrons who bring in eggs and "take them out in trade."

Mrs. Tupper figured that if a trade-mark has advertising pull for a manufacturing concern, it would help the farm business. She christened her 10 acres "Graceland Farm," and this name is stamped on everything that leaves her place. She had cards printed bearing the name of the farm, its telephone number, and its products. Graceland Farm is also emphasized on letter heads.

"Prompt attention to correspondence is an easy method of advertising a farm business," she suggested. A typewritten letter on letterhead stationery, mailed promptly, creates a pleasant impression on the man who has written to inquire the price of a setting of eggs or a trio of chickens.

"Suppose I delayed a week and wrote the reply with pen and ink, or, worse, with a pencil on ruled tablet paper? I'd stand a good chance of losing a customer, wouldn't I? If I didn't miss an order outright, I should certainly leave a suggestion of inefficiency and carelessness which could only be charged to the debit side of the business."

She has found that a $50 typewriter and a letter file have helped greatly to create the good-will which is as essential to the farmer business woman as to the woman who runs a millinery shop or an insurance office. [CONTINUED ON PAGE 9]

A service wagon saves many steps between the kitchen and the dining-room

PATRIOTIC FARMERS FUND NOTE

....., 191....

Six months after date, or earlier at my option, I promise to pay to the order of .....

at ..... Bank, ($.....) Dollars,

for value received, with interest at the rate of six (6%) per cent per annum.

This loan has been made to assist me in purchasing live stock and to secure payment thereof, I hereby declare that all of said stock and first young shall be held by me in trust for the holder of this note. The said stock and young may be sold by me in the ordinary course of business, the proceeds to be collected by me and to be held by me in trust, separate and apart from all other funds, for the holder of this note. It is, however, understood that I may use out of said proceeds, as and when the same are collected, such sums as were necessary for the proper care and marketing of said stock and young.

Form 3—Live Stock Loan (Signed) .....

A New Security for a Loan—Your Character

How a Patriotic Farmers Fund helped worthy New York farmers to buy seed, fertilizer, machinery, and live stock, and to pay their hired help

By Charles Henty

WHEN President Wilson, in a proclamation issued April 15, 1917, called on the farmers of the nation "to omit no step that will increase production on their land," it occurred to a group of New York business men that many farmers in that State would be unable to respond to the call because of lack of capital. Seed and fertilizers were high-priced. Labor was not only high but scarce. The season was unusually cold and backward, which would necessitate rapid work in planting when the weather became favorable.

To furnish the money with which farmers could buy seed, fertilizers, machinery, and labor, these business men organized the Patriotic Farmers Fund, which is now in its second year. The object of the fund was to aid the small farmer and renter who had no regular banking connections, and to furnish him money on a "character loan" basis. The larger farmer could obtain all the credit he desired, but there were thousands of honest, hard-working men who could offer nothing in the way of security that would be acceptable to the banks. A little cash at the right time would be a godsend to such a man.

The directors of the fund began by appointing local loan committees in various communities throughout the State. Each committee consisted of three men, usually two farmers and a banker or business man—citizens who commanded respect and were possessed of sound judgment.

Farmers who desired to avail themselves of the loans were asked to fill out formal applications. These were made out in duplicate. A list of the banks where the notes and applications could be presented was given out with the blanks. When the applications had been approved in writing by at least two members of the local committee, they were filed at the bank. The bank would then pay the farmers the full face value of the notes, which bore six per cent interest.

The borrowers agreed to use the money for planting and caring for such crops as were specified in the applications. The crops which were to be raised with the money were offered as security. No second signers were required, and it was understood by both parties to the loan that the real security was the character and honest purpose of the borrower.

When confirmation of the loan reached the office of the secretary of the fund, he would send out a letter explaining that the purpose of the fund was to assist in growing crops that would be vital in winning the war. He expressed a friendly interest in the success of the farmer's enterprise and offered any assistance within his power. Hundreds of responses were received to this letter, every one expressing gratitude for the co-operation that had been given.

One especially interesting letter was from a woman borrower whose husband had gone to the front as a member of the National Guard. With the assistance given she was able to keep the farm going through her own efforts, made a living for herself, and in the fall paid back what she had borrowed.

During the spring and early summer, $284,842.68 was lent. The average amount of the individual loans was surprisingly small. One farmer borrowed as little as $6.10 in order to buy two bushels of seed potatoes.

The number of acres planted with money loaned from the fund was 34,367. Of this acreage, 5,362 acres were sown to oats, 5,514 to corn, 5,689 to potatoes, 6,156 to beans, 5,882 to buckwheat, and 5,824 to miscellaneous garden produce. Out of the $284,842.68 loaned, $15,610.25 was expended for fertilizer and $20,748.25 for labor. The rest was used for seed, to prepare ground, and to cover harvesting expenses.

The reports show that these loans made possible the production of $3,500,000 worth of crops. It furnished the little aid required to supplement the farmer's own capital and efforts and to work out his efforts to a successful conclusion.

The loans became due December 1st. Fully 80 per cent were paid in cash, 15 per cent were renewed, and 5 per cent were carried as past due paper, awaiting the marketing of crops. This showing was made in spite of an unfavorable season and an early frost.

Throughout the fall planting season the Patriotic Farmers Fund, co-operating with the Million-acre Wheat Committee, advanced such money as was needed for the successful seeding of wheat and rye.

"Last July I bought a farm," wrote a teacher in a New York City high school. "It is likely that I shall retire to the farm when my teaching days are over. This Patriotic Farmers Fund is a godsend to me. I am paying my tenant $40 a month and house. My farmhand left me to enlist. I have had to buy teams, tools, and seed. I appreciate this chance to get help.

"By obtaining this loan I was able to get seed and fertilizer which, owing to the high price, would have been impossible for me to get in any other way. Result—four acres planted to early potatoes, and seed for two acres of beans. Also, I sowed two pounds of onion seed and two pounds of beet seed, and bought two pigs which cost me $5 each."

On December 7th the Fund announced to the local loan committeemen that loans would be extended for the purchase of sheep and swine, the limit for the purchase of sheep being $300, and for swine $100. The loan was allowed on only 80 per cent of the market value of the stock. Thus if a man wished to buy hogs worth $125, he could borrow $100 from the fund, and would have to furnish the other $25 himself. Money loaned for the purchase of horses, implements, seed, fertilizer, or pay of labor could still be had for the full amount as before. The hog and sheep plan was advertised extensively in the farm papers and the country newspapers throughout New York, which resulted in many applications for loans.

The farmer who applies for a loan with which to buy live stock must answer these questions: State fully your experience in the care and the feeding of the live stock you intend to purchase. Have you proper housing facilities for this stock? My age is. Married or single? Location of farm? Size in acres? In whose name is the title of the farm? Value of farm? First mortgage, date due, held by. Second mortgage, date due, held by. Leasehold—yes or no? Annual rental? Are any chattel mortgages outstanding against your property? Are there any judgments pending or on file against you? Amount of insurance, life and fire, with the beneficiary? Number of horses? Number of cows, and the average number of quarts of milk produced per day? Number of fruit trees, kind and average yield? Number of live stock purchased with this loan: swine, breed, age, and present market value; sheep, breed, age, and present market value?

Special help was extended to boys and girls, sixteen years of age or over, who are enrolled in the Pig and Sheep clubs. It was pointed out to the young people that they too could serve their country by producing the pork, mutton, and wool which are so much needed to feed and clothe our fighting men.

"Volumes could be written, full of heart interest, from the letters which have come to us," said Marc W. Cole, secretary of the fund. "We feel that we have performed a constructive piece of work. Our agent banks are almost unanimous in their endorsement of our ideas. We have broken down the barrier which no doubt existed between the small farmers and their friends the bankers. We have distributed the risk of loss from crop failure over all sections of the State. We have strengthened the weak link in the agricultural chain." [CONTINUED ON PAGE 7]

PATRIOTIC FARMERS FUND

Application For Live Stock Loan

1.—LOANS TO BE MADE ONLY FOR THE PURCHASE OF SHEEP AND HOGS.
2.—THIS APPLICATION AND DUPLICATE SHOULD BE FILLED OUT AND SIGNED AND HANDED TO THE LOCAL LOAN COMMITTEE.
3.—NO LOAN SHALL EXCEED 80% OF THE MARKET VALUE OF THE STOCK.
4.—NO LOAN FOR SWINE SHALL EXCEED $100.00.
5.—NO LOAN FOR SHEEP SHALL EXCEED $300.00.

..... 191

I hereby apply for a loan of ($.....)

for the term of six months, the proceeds of this loan to be used for the purchasing or caring for live stock as specified herein, and I offer as security therefor my note which is to be a lien on the stock and first young purchased or cared for with the proceeds of the loan.

I hereby certify that all the statements in this application are true and complete and are made for the purpose of obtaining credit.

(Sign here) .....

(P. O. Address) .....

The rule that no loan could be for more than 80 per cent of the market value applied to live stock only. Full value was allowed on seeds, implements, etc.

A Black Cat for Luck

A big policeman with a big heart wins a small fortune unexpectedly. He also learns that beauty is not the only quality to be considered when choosing a wife

By Mary Barrett Howard

O'HAGAN, his right arm in a sling, limped through the train shed at Chicago and swung himself, grasping the rail of the last car awkwardly with his left hand, on to the New York limited just as it moved slowly out of the station.

Just out of the hospital, the big policeman staggered a bit from weakness as he made his way to the smoker. Sinking into the nearest seat he lit a strong black cigar and drew a long breath.

"I'd oughta had a look in at Strike," he muttered worriedly. "But them doctors kept me there gassin' till I pretty near missed me train."

If you are a reader of Chicago newspapers you may have heard of Strike, the black cat which a striker, during one of the perennial conflicts between capital and labor, had flung, no more convenient weapon being at hand, at the head of a scab motorman. Both cat and motorman, somewhat damaged, had been rescued by Officer O'Hagan, and the cat, after being produced in court as evidence against the striker, had been taken to police headquarters and adopted by the force as its mascot.

But Strike, as inevitably the black cat had been dubbed, while accepting the attentions of the other men with the air of bored indifference peculiar to his species, had attached himself to O'Hagan with an affectionate tenacity more commonly seen in dogs than in cats. The big policeman had reciprocated this feline devotion with an unabashed ardor which had made him the butt of much good-humored chaff from his comrades. After a few calming pulls at his cigar O'Hagan's handsome face cleared.

"I bet the fellows was tryin' to put one over on me," he reflected. "I ain't boob enough to fall for their talk about Strike missin' me so he's off his feed—they was just stringin' me."

Dismissing therefore the one flaw in his otherwise unalloyed happiness, the big man allowed the image of a blond girl to efface that of a black cat. Handsome Tim might have posed as a picture of the joy of life personified as he sat wrapped in dreams of pretty Pearl Dailey, whom he was now on his way to marry. And this in spite of the lame knee and useless arm that still bore witness to the extent of the injuries he received when he had dragged a pair of terrified horses from the rails of an approaching trolley car.

Fate had decreed that the occupants of the carriage drawn by the runaways were the wife and children of a very great man indeed, who, although he was on the eve of taking passage for England on an important diplomatic mission, had waited to assure himself that the injuries of the big "motor cop" were not fatal, to deposit several thousand dollars in a bank to O'Hagan's credit, and to obtain a promise from the police commissioners that this humble hero on his recovery should be given two months' leave of absence.

O'Hagan, to whom the rescue of women and children was something all in the day's work, at first flatly refused to be rewarded for an act that he regarded as merely his duty. It was not until his nurse had advanced an argument to reinforce adjurations of his chief that O'Hagan was persuaded to accept his unexpected good fortune.

"Perhaps you don't deserve it, Mr. O'Hagan," the little nurse, who had grown fond of the big, patient fellow, said laughingly. "But you know a man who has saved the life of a black cat must expect all sorts of good luck to come his way, so you may as well make up your mind to it."

"Sure, there's plenty believe the same," O'Hagan acquiesced gravely. "And I'd be easier about takin' the money if 'tis to Strike I'm owin' it, instead of to a man I've never set eyes on."

HE HAD grinned rather shamefacedly at the laughter this speech elicited, but all the same he continued secretly to treasure the little nurse's suggestion, and before he left the hospital he had obtained a promise from the chief that Strike should be his wedding gift from the force. For the big motor cop's heroism had not only won for him fame and fortune, but also had caused pretty Pearl Dailey to reconsider her refusal to marry him; the highly dramatic versions of the accident which had been published in every paper in the country having brought forth a letter from his hitherto obdurate sweetheart, offering, under certain conditions, to abandon her decision never to consent to live anywhere except in the great Eastern metropolis where she had been born and bred.

O'Hagan's idea of a blissful honeymoon would have been a stay of a week or two in New York and then a return to Chicago to invest his little fortune in a snug cottage in the suburbs, where he could enjoy the remainder of his leave in quiet domesticity. But pretty Pearl had stipulated that the whole two months were to be spent in New York, and Tim O'Hagan was humbly grateful to her for taking him on any terms.

A few hours after the train had pulled into the Central Station the big policeman, fresh and pressed from the tailor, smooth and perfumed from the barber, was holding pretty Pearl in his eager arms, and had made the discovery that in a dashing gown of tango red his girl was even more of a "peach" and a "queen" than she was that day when she had sent him away with the cruel remark that she wouldn't leave New York to live in Chicago for him "nor for any other fellow that ever came over the pike."

"This suits me all right," he said, lying manfully

O'Hagan had expected to be married as soon as he could obtain a license, but when he broached the subject he was promptly told of his mistake.

"I ain't goin' to marry you till just before your leave is up, Tim," his fiancée informed him. "My trousseau ain't bought yet, and anyhow it'll be lots more fun bummin' round town before we're spliced than it will after."

"Say, dearie, are you sure you want to blow in all that money the way you said in your letter?" O'Hagan ventured. "It would go a long way toward buyin' a nice little place in the suburbs on which I got me eye."

"Oh, you're tryin' to welch, are you?" the girl said scornfully. "Didn't you promise me if I'd marry you and go to that jay town to live that you'd show me one good time first if it took every cent of that money?"

"Sure I did," O'Hagan acknowledged. "But if you was carin' for me like I do for you, darlin'," he said wistfully, "'tis not of cabarets an' lobster palaces you'd be thinkin', but—"

Pearl's red lips set obstinately.

"You promised," she insisted. "And listen, Tim O'Hagan, there'll be no cottage in mine. We're goin' to *board*. I ain't goin' to housekeepin'—workin' myself to death gettin' meals an' washin' dishes."

The big man sighed, but love made him docile, and Pearl presently carried her point in another contest of wills.

"Say, Tim, d'you remember Mary Maloney?" she went on. "She's boardin' with us since her mother died, and I asked her to go out with us to-night."

"Sure, I remember Mary. She was one nice kid," O'Hagan said warmly. "But, dearie, what do you want her along with us for? I was thinkin' I'd got you all to meself at last."

"Oh, I know three's a crowd, but there's another fellow comin' too," Pearl said carelessly. "Mary won't cost you nothin'. Hank Fink ain't no tightwad."

O'HAGAN'S handsome face reddened.

"I ain't no tightwad neither," he protested. "But when I ain't seen me girl for two years I—"

"Ain't I tellin' you we can pair off?" Pearl demanded. "It'll do Mary good to have a bit of fun," she continued craftily. "Poor kid, she ain't never got over losin' her mother. But she won't stir a step if you hand her the ice pitcher—Mary's awful sensitive."

The big policeman melted instantly.

"Sure, I wouldn't do that, now; sure I wouldn't," he stammered. "But who's Hank Fink?"

"He's a floorwalker at Beaton & Company's. One swell fellow, believe me."

Miss Dailey omitted to mention that before the news of O'Hagan's good luck reached her she had almost decided to marry the "swell" floorwalker.

"I wonder what's got Mary," she added. "Afraid of buttin' in, I bet. I'll fetch her."

A moment later O'Hagan was holding the hand of a slim, pale girl, whose wide gray eyes were looking up at him with innocent, adoring concern.

"Oh, Tim, was—was you hurt bad?" she faltered. "You—you won't be lame always, will you?"

"Sure I won't," O'Hagan laughed. "I'm feelin' fine an' dandy, Mary, but I'll not be fox-trottin' yet a while."

Big Tim was too blinded by the little god Love to contrast the tender concern manifested by this girl, whom he had called his "little pal," with the calm indifference the girl he was to marry had shown in making her plans for the evening without regard to the possible effect of a long, tiresome journey on a man who had just left the hospital. He was equally blind to the fact that Mary Maloney, with her smooth bright hair and low, sweet voice, her plain black coat and skirt and immaculate white linen blouse, would have won an approving glance from critical eyes which would have regarded pretty Pearl in her dashing gown of tango red with amazed amusement. However, he had been very fond of his little pal, and he stood smiling down at her, holding both her small hands in his one big warm one until Pearl, who had slipped from the room unnoticed, returned ushering in an anemic-looking young man with puffy eyelids and an air of extreme sophistication.

"Tim, meet Mr. Fink," she said with an involuntary glance of admiration at the floorwalker, who, a "classy dresser," as she put it, at all times, on this particular night would have caused Solomon in all his glory to hide his head abashed.

Pearl's plans for the evening included a dinner at one of the most heavily gilded Broadway restaurants, to be followed later by dancing at a noted cabaret. O'Hagan offered no further objections, although before the dinner was over he was looking pale and tired, and he was limping painfully when the four young people entered the cabaret.

"Tim, I'll leave you an' Mary to talk over old times," Pearl announced lightly. "Mr. Fink wants to learn me the last new step. Believe me, he's some dancer."

"You're some dancer yourself, girlie," retorted the gallant Mr. Fink.

O'Hagan's honest blue eyes followed his sweetheart's yellow head and violent red gown somewhat wistfully. Then with an effort he turned to the girl who sat so quietly by his side.

"This suits me all right," he said, lying manfully. "But maybe you'd rather be dancin', Mary? I see a fellow over there I used to know. Shall I bring him here and introduce him?"

"Oh, no, Tim—please. I'd so much rather sit here with you," the girl said hurriedly. "If—if you don't mind."

"Sure I don't. This suits me fine," O'Hagan repeated.

So the two talked on and on while Pearl Dailey and Mr. Fink fox-trotted. Little Mary had a way with her which the worried lover found very soothing, and occasionally, when some reminiscence of the old days made her blush and smile, revealing perfect, dazzlingly white teeth and a singularly alluring [CONTINUED ON PAGE 22]

Uncle Sam, Railroader

By John Snure

THESE are great days at the American capital. The old order changeth. To-day it is and to-morrow it is not. This fact was well exemplified last winter when our Government assumed control of the railroads. At one stroke there was accomplished a change which in effect was perhaps more sweeping and far-reaching than any other one influence that could be brought to bear on the business interests of a great and highly developed country such as ours.

Without the stimulus of war conditions, doubtless there would have been years of congressional seesawing before such a momentous move as the taking over of railroad operation by the Government could have been inaugurated.

But since the change took place, during a half-year of government control, the average citizen hardly realizes Uncle Sam's hand is at the throttle and has already made hundreds of important changes in our railroading operations, which in the aggregate are enabling these public carriers to accomplish vastly more in transportation than when operated under different managements.

Not only is the Government to continue its control during the war, but enactment for continuing that control for a considerable period after peace is declared has already been provided for. And now, if we are to give weight to the opinions of some of our most astute statesmen in Washington, there is a considerable likelihood that Uncle Sam will think many times before relaxing his grasp on the nation's steel-railed thoroughfares despite the fact that Congress would not go on record for government ownership.

Transportation by land and by sea has become in many respects the most vital problem of the war. And just to the extent the United States can solve this problem, to that extent will this country be influential not only in forcing a just peace according to its desires, but, having accomplished this, it will then be in position to maintain its place commercially the world over through these same means of transportation on land and water.

One of the most telling arguments for centralization of transportation control was brought out during the coal famine last winter when it was found that competing railroads were in many places hauling coal in directly opposite directions for long distances when coal consumers or would-be consumers were freezing and had to wait until a competing road could deliver them coal from a distant mine.

The farmer is among those most interested in the new order of railroading, he having learned to his sorrow long ago how inadequate our transportation was during the stress of moving crops following each season of heavy production. He now understands as few others do that on the ability of the railroads and waterways to move farm products promptly will depend largely his chances for realizing a fair deal for his labor and intelligent farm management in the years to come.

A New Security for a Loan—Your Character

[CONTINUED FROM PAGE 5]

Extracts from a few of these letters speak for themselves:

"Your loan has helped me out. If I had not obtained it I should not have been financially able to buy any seed at all last spring."

A farmer wrote that he found himself greatly handicapped for lack of a horse. He knew of a horse he could buy for $150. The loan made it possible for him to secure the horse and raise his full acreage of foodstuffs.

"We beg to thank you and the members of the association for the patriotic loan to the New York farmers," wrote another borrower. "It is generously given and timely, and in many instances has solved the problem of the rental farmer and the high cost of planting. We are the ones that have difficulty in borrowing from the banks and are anxious to do our bit. We could have gone no further without this help."

The Patriotic Farmers Fund is now entering upon its second year with bright prospects for a useful season. The need for capital is keenly felt by small farmers and tenants in many other States. Adoption of the same plans in other States would undoubtedly work out as satisfactorily as in New York.

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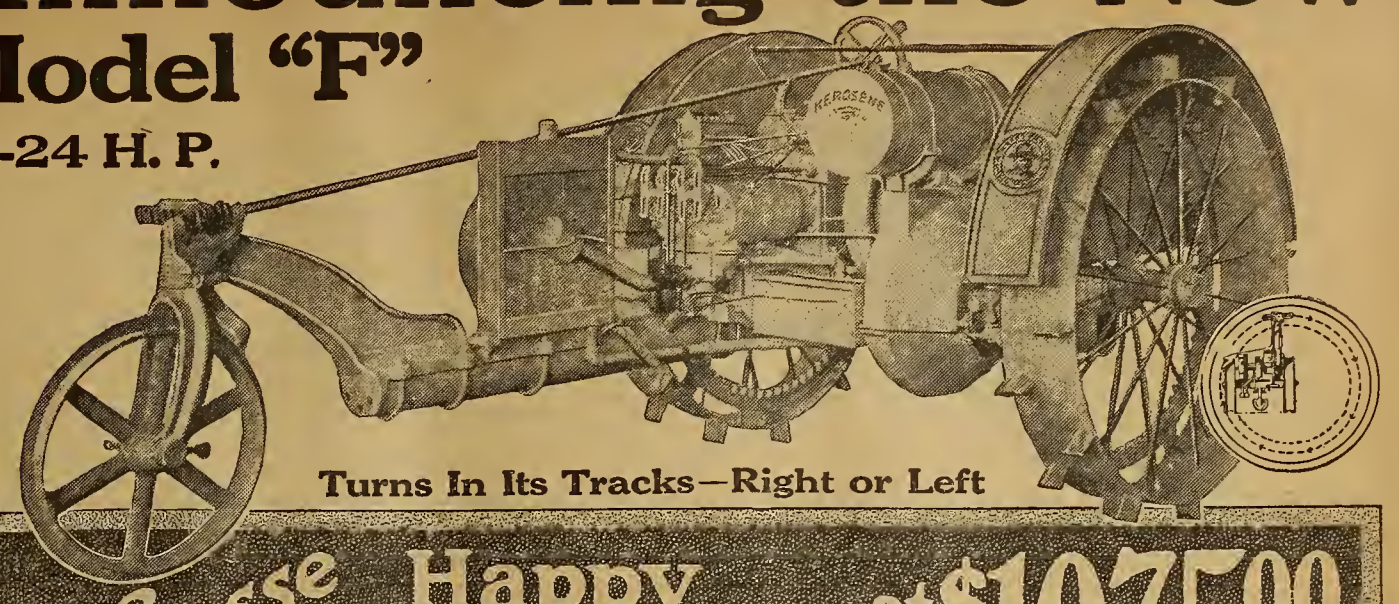

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Oiler—Madison-Kipp Mechanical.
Transmission—Sliding gear, running in oil.
Final Drive—Roller Pinion, pack hardened steel.
Cooling System—Circulating pump, Spirex Modine radiator and fan; motor completely water-jacketed.
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Clutch—Band, contracting
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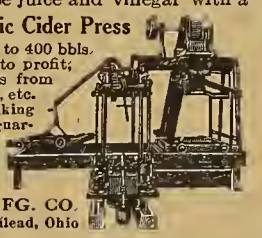

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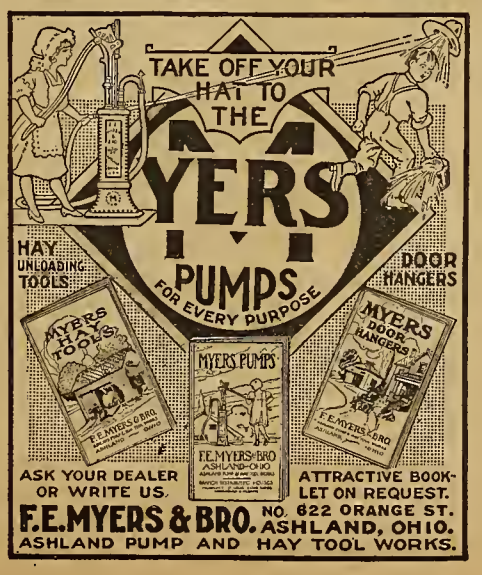

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FARM AND FIRESIDE

The National Farm Magazine

Founded 1877

Published Monthly by

The Crowell Publishing Company

Springfield, Ohio

HARRY M. ZIEGLER, *Managing Editor*

ASSOCIATE EDITORS:

B. F. W. THORPE H. H. HAYNES HELEN L. CRAWFORD

ALDEN PEIRSON, *Art Editor*

By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

JULY 1918

Why Your Copy May be Late

YOUR copy of the magazine may be a little late these days because the railroads are congested with shipments of war supplies. Be patient, therefore; you will get your magazine after a few days' delay—at the very most.

When Peace Will Come

PEACE will come when the world is ready for it. And the world will not be ready for peace until the German military autocracy is crushed to death, and the world can make a lasting peace with a self-governed German people.

Many times we have heard that the present offensive is the Germans' last desperate effort, and if it fails they will be ready for peace. Possibly this is so. The Germans have been ready for peace ever since they began the war, and are ready for peace to-day—on German terms.

Anyone who believes that the war will end when the German offensive is stopped is going to be disappointed. The Germans would be glad to have the Allies believe they are near exhaustion. They have spread this tale many times before to find that it pays unusually well.

Nothing would suit the Germans better than to have us believe our work is done after the present German drive is stopped. The Germans themselves have no such belief. If the present drive fails, the Kaiser, Hindenburg, and Ludendorff will be busy shaping German public opinion and getting ready for the next one.

Peace will come not by stopping a German drive, but by the Germans failing to stop an allied drive. The less we talk about getting peace by stopping the Germans fifty miles from Paris the better prepared we shall be for the big job ahead after they are stopped. There will be no peace until the Germans have been driven out of France and Belgium and back of the Rhine, and kept there.

Peace will come when the world is ready for it. And the world will not be ready for it until the German military autocracy is crushed to death, and a lasting peace can be made with a self-governed German people.

Good Roads Saved France

GOOD roads have twice saved France in the present war. Had it not been for the radiating road system maintained by the French Government, the Germans would have won the battle of the Marne and reached Paris. The Germans had calculated on only three divisions being sent out from Paris to stop the invasion. Instead, the excellent system of highways made it possible for five divisions to be sent to this front.

Again, shortly after the battle of Verdun started, the French railroad which was to furnish many of the supplies to the troops was destroyed. The French Government, however, had a macadam road 32 feet wide on which four lines of traffic, two in either direction, were maintained. Day and night 14,000 motor trucks carried men and equipment.

The traffic never stopped. When a hole was made in the road, a man with a shovelful of rock slipped in between the lines of trucks and threw the rock into the hole, then jumped aside to let the trucks roll the rock down. Then another man would follow his example, and so on until the hole was filled. Trucks that broke down were shoved aside, and repaired almost instantly. Had the French depended on their railroad or on poor highways the Germans would have won the battle.

There are few places in which good roads will win great military victories. But there are many places in which they will win great victories in time of peace. Whenever a crisis—military, economic, or social—occurs in the life of a community, the condition of the roads is a significant factor in determining whether the community will go up or down, forward or backward. The community with good roads is the community that will deliver the goods when the necessity comes.

Roast Lamb and Green Peas

THIS is the time of year when the forehanded farmer is enjoying meat from his early lambs, along with fresh, succulent green peas from his own garden. Mint sauce from the farmer's mint bed adds savor to the feast. There are fresh strawberries, with rich, yellow cream, or, if the strawberries have not yet ripened, Mother has some fruit that she preserved last summer. It has the delicious flavor that canned stuff from the grocery store never possesses. The table is decorated with early flowers from the beds in the front yard.

The farmer has the opportunity to live well, if he only will. It is one of the many fine things about farming. He may have fried chicken as often as the parson on a visiting tour among his parishioners. He may have eggs, gathered with the dew upon them. He may have ham a year old last January, with the savory tang of the smokehouse still in it. He may have, throughout the summer, fruit and vegetables of a quality and freshness that the wealthy city man tries in vain to obtain, and for the winter he may have these preserved in such a way that they are almost as appetizing as when fresh.

There are two classes of men who can live surpassingly well—the millionaire and the farmer. And the advantage—in appetite for the food and ability to digest it, as well as in the quality of the food—is really with the farmer. Further, the farmer is taxing no transportation facilities to provide him with food. Too, he eats as the Food Administration has advised, well, wisely, and without waste.

The Farmhand's Wages

THE farmhand comes in for considerable discussion nowadays, but he is much better off than most people think. The Ohio State Council of Defense has been making a survey of labor conditions, and reports that a married man working on the farm for $30 a month is as well off as if he were to receive $105 in a city; that a $35 a month farm job equals a $110 city job; that a $40 farm job equals a $115 city job, and so on. "Not taking into consideration," the report adds, "the possibility of raising some stock or produce on shares, which is usually customary."

Nor has the married man on the farm job a monopoly of advantages, for the report further finds that an unmarried farmhand receiving $25 is as well off as if he were receiving $80 in the city; that a $30 job for the bachelor farmhand equals a $90 city job; and that a $40 job on the farm is as good as a $95 job in the city, and so on. The difference in aggregate returns is brought about by house rent, groceries, meat, milk, light, fuel, unnecessary expenses, and luxuries.

A few reports like this will have good effect in turning the tide back toward the land once the war is over. For the last three or four years it has been running cityward strongly. As city labor was taken for the army, for the shipyards, or in the natural course of advancement, farm labor has been called upon to make up the deficiency. Wages are advancing as a natural result, so that the farmhand who received $25 or $30 a few years ago is now drawing down his $40 every month—as good, the Ohio investigators say, as $95 or $115 in the city, depending on whether the man is married or not.

Some day this country is going to take the steps necessary to enable the farmhand and the farm tenant to secure farms of their own, just as it has already taken steps to enable farm landowners to secure money from Uncle Sam at low rates of interest and for long periods. The help may come in the way of advance loans on land, stock or machinery purchased, or in grants to soldiers returning from war service. It is inevitable that it is coming. When that time comes the farmhand will loom larger on the industrial and economic horizon than ever before, and he is no inconspicuous figure even now.

In the meantime the duty devolves upon him of giving good service and saving every penny for the opportunity which will undoubtedly be his in the near future.

What's in a Name?

EVERY once in a while someone replies, "Oh, well, what's in a name?" When William Shakespeare had Juliet ask those words, it may have been that he never expected an answer from us. But our hand is up, Mr. Shakespeare: we think we know.

There's a whole lot in a name—almost anything from a rough-and-tumble fist fight to a parson and wedding bells, if you say the right names to the right persons. But in all probability you were talking about the names that your friends call you by. There is a great deal in them too.

A name can either fit a person and become as much a part of his personality as his voice and manner, or he can carry it through life as excess baggage. There is a football player "somewhere in France" who weighs 245 pounds, has red hair, hates the girls, and used to drive an ice wagon. His name is Percival. He dislikes it more than anything else in the world. He tries to be rough to get away from it, but it haunts him like an evil thing.

We know a man whose first name is Pleasant. If Pleasant only hates his name, Percival is proud of his. And then there is a woman who, in all probability, years ago was a likable child and was given the good, sound name of Mary, and then nicknamed Babe. To-day she is a grandmother, and it sounds natural for the youngsters to call her Grandma, but it is a harsh, unpleasant sensation when one of her nephews appears on the scene and calls her Aunt Babe.

Yes, we have firm convictions that there is something in a name. A good, rugged, virile name for a boy and a sound, sensible name for a girl really amount to a whole lot in their lives. If the name for your boy is one that is easy to make over into a pet name or a diminutive, beat the rest of the crowd to it. Nickname him yourself, but pick out a good one.

Buy Farm Loan Bonds

FEDERAL Farm Loan Bonds—which offer safe, long-term investments, increase farm production, and make it easier for farm tenants to buy and own farms—bear five per cent interest, payable semi-annually, May and November. They are issued in denominations of $25, $50, $100, $500, and $1,000, and in either coupon or registered form. They are due in twenty years and redeemable after five years. They are exempt from federal, state, municipal, and local taxation.

The bonds are issued by twelve regional federal land banks. Every bond is the obligation of the land bank that issues it as well as all of the other eleven land banks. Every bond is based upon farm mortgages pledged as security.

No mortgage is made for more than fifty per cent of the value of the farm, as fixed by a federal land bank appraiser. These banks and the entire system are examined, supervised, and operated by the Federal Farm Loan Board, a bureau of the Treasury Department at Washington.

All loans are made through co-operative organizations of farm borrowers, termed National Farm Loan Associations, very similar in character to city building and loan associations. Each mortgage is guaranteed by the association.

Taking out a mortgage in the federal farm loan system enables a farmer to extend his operations, become a greater producer, buy more machinery, intensify his farming, supply himself with live stock, and otherwise take a stronger financial position. He becomes a better customer of the bank, of the store, and of the manufacturer.

Landowners who rent their farms out cannot borrow under the act. The interest rate to the borrower at present is five and one-half per cent a year, plus a one per cent amortization charge, so that by the payment of six and one-half per cent a year his loan is extinguished in thirty-five years.

Whatever increases the earning power of the farmers of your community directly contributes to your prosperity. The federal farm loan system, then, is your affair as it is that of every American citizen. If you put your shoulder to the wheel, you can speed up the sale of Farm Loan Bonds in your community. Buy as many yourself as you can afford, and talk them to your friends and neighbors.

You can buy a Federal Farm Loan Bond at 101 and accrued interest. You can order through your local bank, any of the twelve federal land banks, or the Federal Farm Loan Board, Treasury Department, Washington, D. C.

Durable Soles That Save

You don't have to buy shoes so often if you get them with Neōlin Soles. For these soles are *very* durable. Waterproof, too, and won't wear slick.

Neōlin
Trade Mark Reg. U. S. Pat. Off.
Soles

Created by Science — to be what soles ought to be. They come on new shoes of all styles for men, women and children, and are available everywhere for re-soling and half-soling. Always marked: Neōlin

See displays in shop windows

The Goodyear Tire & Rubber Co.
Akron, Ohio

Ten Acres and a Living

[CONTINUED FROM PAGE 4]

Mrs. Tupper has encouraged automobile trade. Her apiary is within sight of the road, and a "Honey for Sale" sign brings many a customer. Many of her city patrons have the habit of driving to the farm and returning with a hamper laden with eggs, honey, butter, or canned stuff from the vegetable garden. The garden last summer supplied material for more than 900 cans of vegetables.

The neighbors smile at her zeal for fairs and poultry shows.

"It isn't fun altogether: it's business," she tells them.

It was cold, disagreeable work, for instance, to prepare an exhibit for the Heart of America Poultry Show at Kansas City last fall; but Mrs. Tupper felt repaid. She won first prize on pen, first and second on pullet, and fourth on cockerel. Then she exhibited at the St. Joseph, Missouri, Poultry Show with even better success.

"These prizes will add to the value of every chicken I have, and to all my poultry products. They give me another advertising point," she said.

"The shows gave me a fine opportunity to meet possible customers and to make friends for my business. I was on the job for days. I met scores of people and distributed hundreds of cards. I learned a lot, too, in talks with judges and experienced breeders."

The Tupper bungalow is neat and attractive. In spite of her duties in the poultry house and apiary, Mrs. Tupper serves appetizing meals. She finds time for church work and neighborhood calls, and gives every Thursday to the Red Cross.

The housework is speeded up with such conveniences as hot and cold water in kitchen and bathroom, and steam heat. The kitchen is an efficient little workshop lined by cupboards and shelves. Mrs. Tupper can sit before her kitchen cabinet and prepare a meal without moving about for ingredients and utensils. A service wagon saves steps between kitchen and dining-room.

The floors of the bungalow are of hard wood. They are waxed a few times each year, and a little work each morning with dust mop and carpet sweeper keeps them in good order. The washing is sent out.

"I couldn't earn an income from the farm if I had a farmhouse without modern improvements," Mrs. Tupper declared. "Reducing drudgery to a minimum is only plain business sense. Laundry work, scrubbing, and dishwashing has a low economic value. Such unskilled labor eats up the time and strength one needs for the more profitable and interesting tasks of farm management, accounting and correspondence, advertising and marketing."

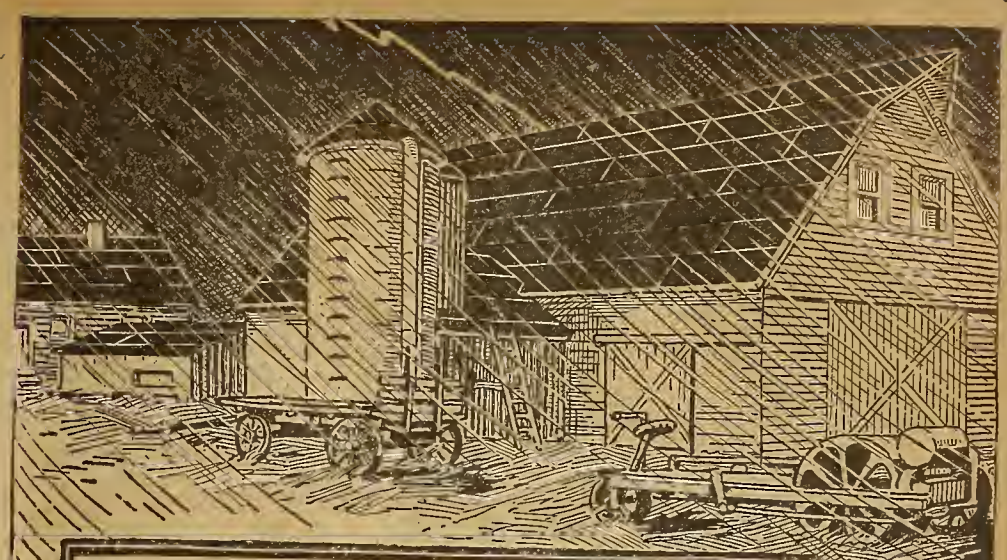
A Good Road

By H. J. Krier

I AM the road
That carries the load
From countryside to town.
If you drag me true
I will pull for you,
And never mire you down.

Our August Number

INTERESTING articles in the next issue are: Our Sea Fighters, by L. M. Smith; Will Your House be Warm—Next Winter? by W. L. Nelson; Estimating the Nation's Crops, by E. B. Reid; Smokes for the Trenches, by Frank Ziegler; Dulcie Decrees, by Elva Sawyer Cureton; Saving the Wheat Situation, by Donald Morton; The Market for Home-Canned Products, by Margaret B. Sharp; and a double spread of pictures entitled "Farmer Athletes."



Barrett Everlastic Roofings

Resist Storms and Fire

You will find Barrett Everlastic Roofings far more durable under all conditions than any other roofings made. They are absolutely water-proof and weather-proof. They resist sun, rain, wind, and fire.

The Everlastic System of Roofings provides a roofing for each type of steep-roofed building—house, garage, barn, chicken-house, silo, or shed.

Everlastic Roofings give you the highest possible satisfaction at the lowest possible price. Read the brief description below.

Everlastic "Rubber" Roofing

A recognized standard among so-called "rubber" roofings. Famous for its durability. Made of the best waterproofing materials, it defies wind and weather and insures dry, comfortable buildings under all weather conditions.

Everlastic Slate-Surfaced Roofing

A high-grade roll roofing, *surfaced with genuine crushed slate* in two natural shades, red or green. Never needs painting. Colors are permanent. Handsome enough for a home, economical enough for a barn or garage. Combines real protection against fire with unusual beauty.

Everlastic Multi-Shingles

Made of high-grade felt, thoroughly waterproofed and *surfaced with crushed slate* in natural colors, either red or green. Laid in strips of *four shingles in one* at far less cost in labor and time than for wooden shingles. Gives you a roof of unusual artistic beauty that resists fire and weather.

Everlastic Tylike Shingles

Made of the same durable slate-surfaced (red or green) material as Everlastic Multi-shingles but cut into individual shingles, 8 x 12¾ inches. Laid like wooden shingles but cost less.

Write for Free Booklet. For further details write nearest office for free illustrated booklet covering all of these types of roofing.

The Barrett Company

New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Cincinnati, Pittsburgh, Detroit, Birmingham, Kansas City, Minneapolis, Nashville, Salt Lake City, Seattle, Peoria

THE BARRETT COMPANY, LIMITED: Montreal, Toronto, Winnipeg, Vancouver, St. John, N. B., Halifax, N. S., Sydney, N. S.

Kalamazoo Ensilage Cutters

"The World's Standard"

Center-shear cut means better ensilage, smoother running, less power, no clogging of blower. One lever starts, stops and reverses. Big capacity. Perfectly balanced. *Malleable, unbreakable* cutter-wheel and blower makes *fast cutting* practical. Three sizes to meet every farmer's need.

Write for Catalog

Own your own cutter this year—don't depend upon somebody else to cut your ensilage. Every cutter will work overtime this year. Play safe—order yours now. Write today for catalog.

KALAMAZOO TANK & SILO CO.
Dept. 143 KALAMAZOO, MICHIGAN

Get a WITTE KERO-OIL ENGINE For Silo Filling

I Can Make Quick Shipment

Save Your Feed—

Save $15 to $200 on Your Engine—

Save half on operating cost using my New Model "Hot Spot" Kero-Oil Engine—more power—with less fuel. Don't overlook the big money-making possibilities in having a suitable kerosene engine on your farm this year—one that you can install, operate and handle without previous engine experience. You cannot afford to take a chance on out-of-date power for farm work NOW, when I will sell you a high-grade WITTE on practically your own terms--Cash--Payments--Bank Deposit or No Money Down. Money Back if Not Satisfied on My New 90-Day Engine Offer. Write for it today.

WITTE HIGH GRADE ENGINES

Standardized in All Sizes.
2 to 30 H-P.—Stationary—Portable and Saw-Rig

My New Model Kero-Oil Engine is a "jim dandy" on ensilage cutters, blowers, threshers, or other heavy farm machines. No need to pay double to get WITTE quality, or take a cheap make to get a low factory price. Write today for my Free Book, which tells **"How to Judge Engines"**--why the WITTE has full-length base, detachable, water-cooled cylinders that require no packing; vertical valves; "Hot Spot" for preheating fuel; big surplus of power and other improvements--years ahead of old-style engines. Learn why I am able to build better engines at a big saving in cost--sell them for less--quick shipment. Easy to run, no cranking. Simple and durable. I don't "guess" what you might want--I make it. Write your own order--**save $15 to $200.** Get your engine **when** you want it, all complete, ready for business--full equipment with every engine. Write for my Free Book. Read it before you buy. Get my prices and terms. Deal with the man who makes nothing but engines, and makes them right.--ED. H. WITTE, Pres.

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2068 Oakland Avenue, Kansas City, Mo.
2068 Empire Building, Pittsburgh, Pa.

$50 a Week is Within Your Reach

Drop a card to-day and let us tell you how men no smarter than YOU are drawing this amount from us every week.

FARM AND FIRESIDE, Agents' Dept., Springfield, Ohio

BIG MONEY—RAISE RABBITS

FOR US—Belgian, New Zealand, Flemish Giants. We supply stock and pay $7.00 Pair. EXPRESS all rabbits raised from our "PURE BRED STOCK"—Our Expense. Contract and Literature 10c. None Free.

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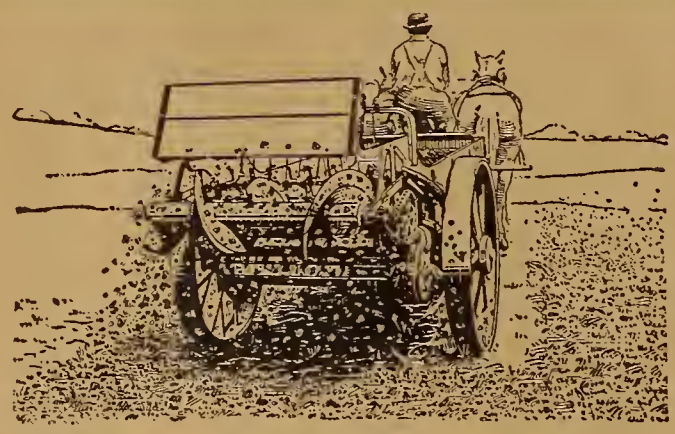


THE BETTER WAY

The farmer who can get stable manure to spread on his fields this year and who fails or refuses to take care of it and spread it properly is losing the chance of a lifetime to make his farm pay handsomely. No farmer can possibly raise too much of any of the staple crops in these times. Increased acreage is pretty nearly out of the question; labor and power are too hard to get. There is a better, easier, less expensive way to grow bigger crops. Save stable manure, add phosphate as your soil requires, and spread it in a thin, even coat with a widespreading

Low Corn King, Cloverleaf, or 20th Century Manure Spreader

Begin right after harvest. With one of these machines, and no additional power or help, you can increase immediate yields, and put your soil in better condition for future crops. They are low, light draft, narrow box machines, each made in three handy sizes—small, medium and large. The entire load is spread in 3 to 5 minutes, in an even coat that extends well beyond the rear wheel tracks. See the machine at the local dealer's place of business, or write us for the many reasons why every farmer should own and use one of these spreaders this year.

INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)
CHICAGO USA

The Mustard Jar

"A little nonsense now and then is relished by the best of men"

A Mere Aquaintance

The young man was calling on the daughter of the household. He stepped into the next room where her father was seated.

"Mr. Jones—er—ah. That is, can I—er—will you—"

"Why, yes, my boy; you may have her."

"How's that? Have whom?"

"My daughter, of course. You want to marry her, don't you?"

"No, sir, I just wanted to find out if you would endorse my note for $100."

"Certainly not. Why, I hardly know you."

Finding an Opening

"I see that old Bill Gilmore has got a job. He's working now in Hicks' livery stable."'

"What doing?"

"Hicks has some horses that won't take the bit, so Bill talks to them till they yawn."

Quite Generous

One of our soldiers, lying wounded in a hospital in France, had beside him a watch of curious and peculiar design. One of the doctors on his rounds saw the watch and became interested.

"Where did you find such a queer timepiece?" he asked.

"A Hun gave it to me."

The doctor was a little surprised, and inquired how the enemy had happened to convey such a valuable token of esteem and affection.

"He had to," was the short reply.

Speaking of Birds

Just as the village "cut-up" tilted back in his chair on the veranda of the small-town hotel an old horse moved slowly past.

"Say, sonny," shouted the "cut-up" to the boy astride the animal, "how long has that horse been dead?"

Quick as a flash the boy replied:

"Three days, but you're the first crow that has noticed it."

Much Cheaper

In these days of high prices many families have to keep close track of the loose ends. A young married man, whose salary was rather small, stepped up to the clerk in the hardware store and asked:

"How much are children's bath tubs?"

"From $3 up," responded the clerk.

"Goll-ee!" ejaculated the young father. "Guess we will have to keep on washing the baby in the coal skuttle."

Quite a Trip

Mrs. DeLaney was a social climber. Her husband had made a lot of money, but she had never been able to force her way into the halls of the elect.

Finally she received an invitation to the home of the dowager empress of social circles. She was admitted to the waiting-room, and there received by that mighty personage herself.

"Won't you sit down?" politely inquired the great one.

"Thank you. I believe I will, as I am a bit tired," said the social climber. "You see, it has taken me six years to get here."

Terrible

"That girl of Bill Smith's is the most tender-hearted girl in the world."

"How's that? She looks strong and healthy and able to stand a shock."

"Sure. But I heard she stayed in her room every Monday—couldn't bear to see her poor old mother getting out the family wash."

Two Legs or Four

Anna, aged five, was drawing a picture of her sister's beau. She worked very earnestly, stopping every few minutes to compare her work with the original. Finally she shook her head sadly.

"I don't like it much," she commented. "'Tisn't much like you. I guess I'll put a tail on it and call it a dog."

Potato Bugs

A group of potato growers and a seedsman were discussing the damage which had been done by potato bugs last season.

"The pests ate my whole crop in two weeks," said one grower. "They ate mine in two days," said a second, "and then roosted on the trees to see if I'd plant more."

"All that is very remarkable," said the seedsman, "but I saw a couple of potato bugs examining the books in our store about a week before planting time to see who had bought seed."

Where to Put Whalebones

They were reviewing the lesson about the whale in the third grade and the teacher was anxious to see how much they had remembered.

"What do we do with whalebones?" asked the teacher.

There was a long silence, then one small boy raised his hand.

"Well, what do we do with whalebones?"

"We put 'em on the side of our plates," he said.

Just Jabs

Doc Brandegee says that in spring weather a coat on the back will save many a coat on the tongue.

The folks over in Europe are not so much afraid of potatoes going down in April as of their not coming up in May.

The crow may be a troublesome bird, but he never gets noisy without caws. Too bad more people are not like crows!

Convoyed

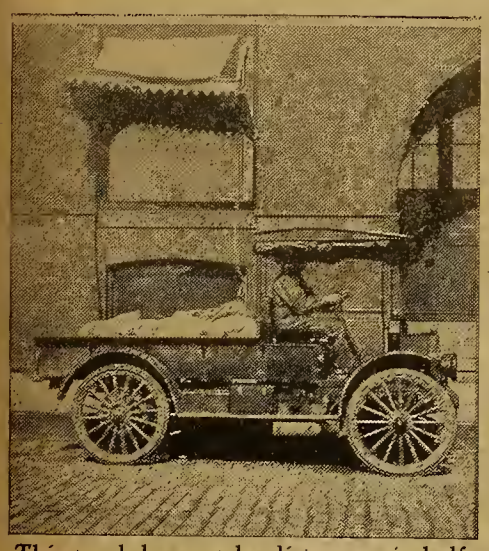
Automobiles

Foiling the Thief

By B. H. Wike

STEALING automobiles is not only a business, but it has also become more or less of a science. In many cases the thieves were well organized. In the vast majority of cases their activity can be attributed either to carelessness or indifference of car owners, and if car owners would take the pains to protect their cars from thieves and joy-riders that they do with their jewelry, there would be fewer thefts of cars to report.

Sometimes the thief confines his work to taking the entire car, and sometimes only parts, such as radiator, tires, batteries, or tools. In either case the thief has a plan laid out—what he will do with the car or parts, where he will take them, and everything else—which is so cleverly carried



This truck has cut hauling costs in half

out that recovery of either car or parts is either impossible or greatly hindered on account of no clues to work on.

The car-thief system or organization has at work a company of spotters whose duty it is to make a note of when and where cars are left by their owners. They soon find out whether the car owners carry any protecting devices, whether they lock their ignition switches, and anything else that might prevent a speedy and safe getaway.

A car driven by a poultryman who, with his family, was visiting in the state capital last fall was seized within three minutes after the owner and his family had left it at the curbing to go to see some friends who lived a short distance away. Of course, when they got ready to travel again and came for the car a few minutes later, it was gone. They had to return home by train, but first reported the theft to the police, who later found the car outside the city by the side of the road. The speedometer showed it had been driven about two hundred miles by the thieves, and was abandoned when the gasoline gave out. The car was a riot of mud and filth, the curtains broken and torn, a tire or two repaired after blow-outs, to say nothing of the probable damage to the engine and gear. In this case the thieves were only joy-riders, and the insurance company had to stand the damage, but this is only an instance of daily and hourly occurrences of car-stealing.

Remove Identifying Marks

Sometimes the engine number is defaced, or the engine may be transferred to a chassis of another number. Various things are done when the thief organization is prepared to make changes in a car in a special garage of their own. The greater number of cars stolen seem to be taken soon after the owners leave them. This is reasonable to suppose, for the thief knows he has a better chance to get a good start from pursuers.

The smooth thief in taking an automobile knows how to get round the ordinary switch, which he does by running on some extra wiring where needed. The locked switch will not stop him, but it will hinder him so that he is very apt to be discovered if the owner is on the alert.

For this reason the owner should make use of reliable means to foil the thief. Removing some invaluable part, like part of the distributor, the conductor bar of the magneto, if the car has a "mag," or similar parts when the car is standing idle, will doubtless persuade the thief to leave it alone.

BEST IN THE LONG RUN

Get Money Out of Your Tires

FOR some years you men who grow the wealth of our country have been *putting money into* tires. Isn't it time to think about getting money *out of them?*

You buy your plows, reapers, threshing machines, and your wagons to get money out of them. You *measure* the money you get out of them by the *kind of service*, and the *length* of service they render you in the *business of farming.* Measure the money you get out of tires the same way. Count the *pleasure* you get from them *excess profit.*

Tires today are the highest common factor in farming transportation. Let Goodrich Tires *make money out of tires* for you in your *hauling problems.*

They will, because Goodrich Tires are built to give the *maximum* of the kind of service which coins into money, as real as the money you get out of your farm implements.

This is not a boast, a mere promise, or a dream. It is fact proved in a nation-wide, year-long testing of—

GOODRICH SERVICE VALUE TIRES

The Goodrich brand on a tire—and you men of the farm know the value of a trustworthy brand—is a guarantee of high service. Goodrich has stood for what is *best in rubber* for a half century. That half century of experience starts Goodrich Tires with tire bodies built right to stand the roughest going.

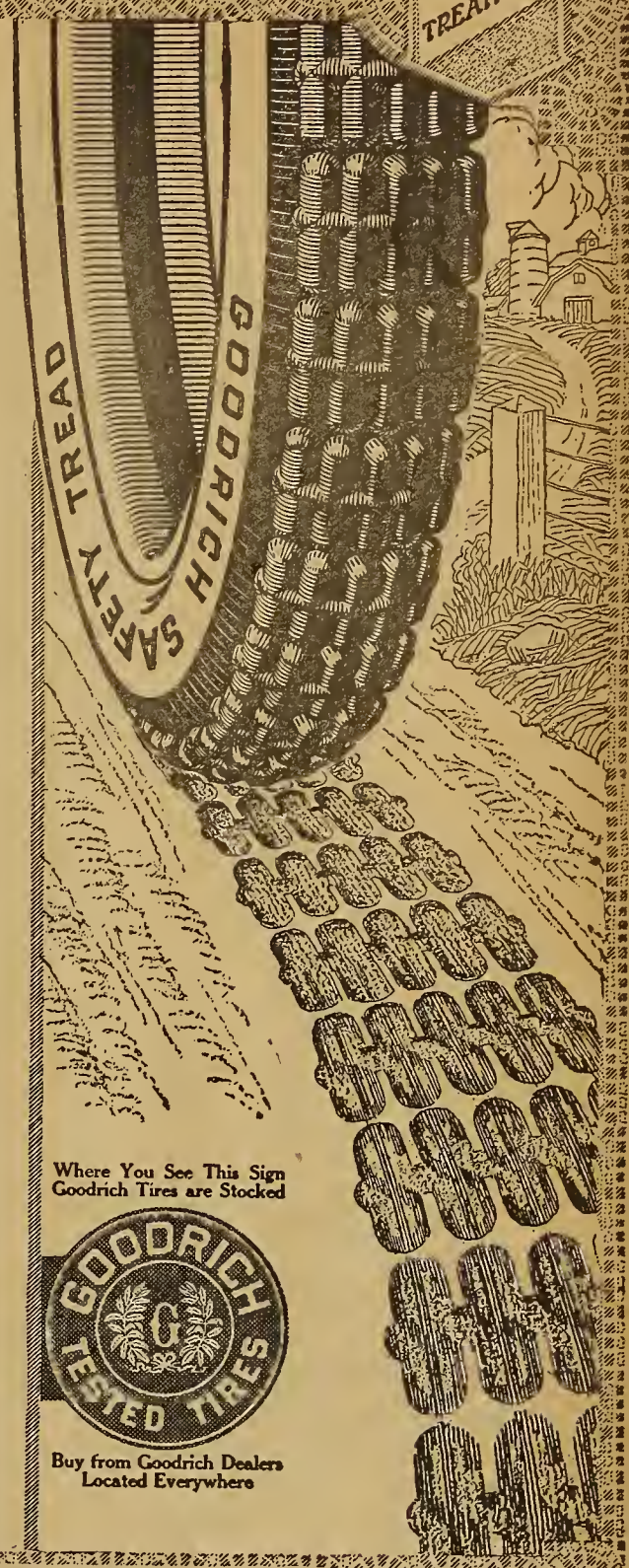
But Goodrich, to take the last risk out of its tires, sends them forth with its Test Car Fleets, and batters them over every kind of road in our country; *perhaps over the roads that pass your farm.* Their *strength* and *dependability* are sure because they are proved.

Proved service means money in your business, money that shows in a *smaller cost* of tires in your farm budget.

It makes no difference what kind of tires you need, pneumatic tires large or small, truck tires, motor cycle and bicycle tires, Goodrich has the tires which on the farm *coin themselves into money.*

The big, generously sized pneumatic tires roll up phenomenal mileage. The truck tires outwear steel under the heaviest loads. Get money out of tires by getting Goodrich Tires.

The B. F. GOODRICH RUBBER CO.



Where You See This Sign Goodrich Tires are Stocked

GOODRICH TESTED TIRES

Buy from Goodrich Dealers Located Everywhere

THE CITY OF GOODRICH · AKRON, OHIO.

AGENTS SOMETHING NEW KEROSENE (Coal Oil) BURNER

Makes any stove a gas stove. No more danger from gasoline. Burns just like gas. Absolutely safe.

Free Sample to Workers

Pays for itself in a short time

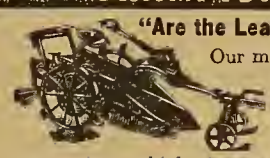
Wonderful labor saver. No kindling to cut, no coal to carry—no ashes to empty. Clean, odorless, safe.

The High Price and Scarcity of Coal makes this burner sell like wild fire. Almost every home a prospect. Women delighted with it. Low Price. Easy to carry and demonstrate. Big Profits. Write for Agency.

Thomas Burner Co. 2946 Gay St. Dayton, Ohio

O K CHAMPION DIGGERS

"Are the Leaders Everywhere."



Our machines are designed and built to meet all conditions under which they may be worked. They embody every point of construction which insures freedom from breakdowns, costly waits and expensive repair bills. Saves time in harvesting and Saves money on your crop of potatoes.

FREE Make inquiry. Write today for our DESCRIPTIVE LITERATURE, ETC., giving particulars of the O. K. Champion Line.

CHAMPION POTATO MACHINERY COMPANY

199 Chicago Avenue **Hammond, Indiana**

OTTAWA KEROSENE ENGINES

Latest design. Durable, Powerful, Reliable, Massive. Built to do hard, heavy work—to give lasting service. Uses Cheapest Fuel. Pulls 25 to 50% more H-P. than rated. **Shipped on three months' trial.** Easy terms. Sizes 1½ to 22 H-P. **10-Year Guarantee. Book free**—postal gets it.

OTTAWA MFG. CO.
1151 King St., Ottawa, Kans.

FREE BOOK

Have You Horses?

Do you own, drive or ride a horse?
Better make sure *Capewell nails* are always used in shoeing. You can depend upon the job being done right if the blacksmith uses Capewell nails. The world's best nail at a fair price—not cheapest regardless of quality.

It is to your interest to mention Farm and Fireside in answering advertisements.

Scenes of Prosperity

are common in Western Canada. The thousands of U. S. farmers who have accepted Canada's generous offer to settle on homesteads or buy farm land in her provinces have been well repaid by bountiful crops of wheat and other grains.

Where you can buy **good farm land at $15. to $30. per acre—get $2. a bushel for wheat and raise 20 to 45 bushels to the acre** you are bound to make money—that's what you can do in Western Canada.

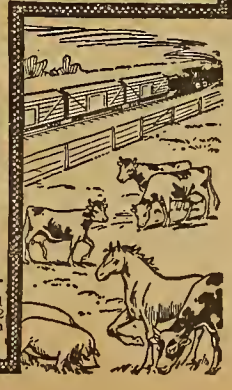
In the provinces of Manitoba, Saskatchewan or Alberta you can get a

Homestead of 160 Acres Free

and other land at very low prices.

During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to the acre. Wonderful crops also of **Oats, Barley and Flax. Mixed Farming** is as profitable an industry as grain raising. Good schools, churches, markets convenient, climate excellent. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

F. A. Harrison, 200 N. 2nd St., Harrisburg, Pa.; W. S. Nethery, Interurban Bldg., Columbus, O.; George A. Hall, 123 2nd St., Milwaukee, Wis.; O. G. Rutledge, 301 E. Genesee St., Syracuse, N. Y.; C. J. Broughton, 112 W. Adams St., Chicago, Ill.; R. A. Garrett, 311 Jackson St., St. Paul, Minn. Canadian Government Agents.



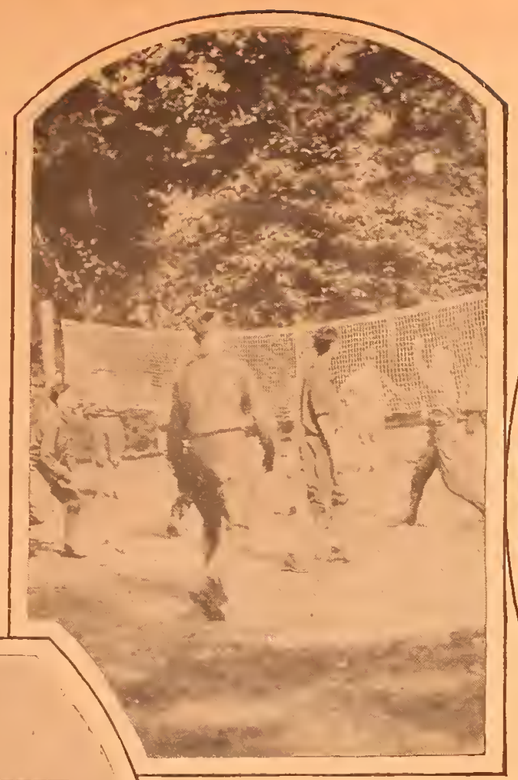
SUMMER PLANTING RECOMMENDED FOR

LYMAN'S GUARANTEED GENUINE GRIMM ALFALFA

Its superiority proven by agricultural college tests and by actual field tests all over the country. Does not winterkill like other varieties. Heaviest yields. Highest in feeding value. Be sure to plant genuine Grimm. Certificate of genuineness furnished with each lot of my seed. Book "How I discovered the Grimm Alfalfa" and seed sample free.

A. B. LYMAN, Grimm Alfalfa Introducer
Alfalfadale Farm, Excelsior, Minn.

At the Training Camps

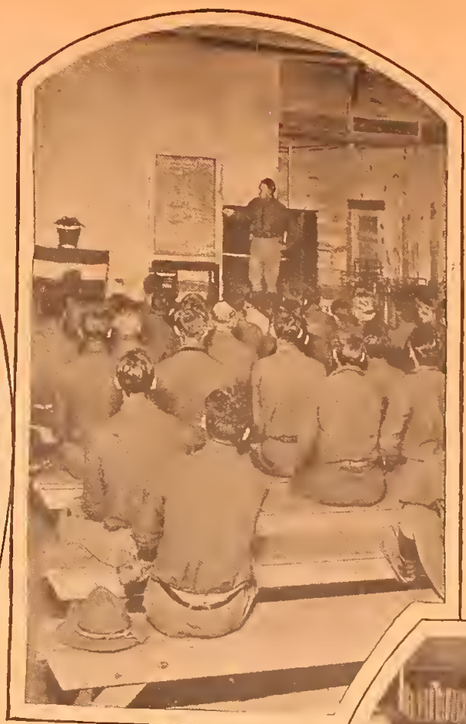


THE soldier finds rest from fatiguing drills in a game of volley ball, baseball, or football. We might think the game would tire him more, but he insists such is not the case. Perhaps he looks upon it in the same way we do upon dancing for recreation after a day of hard work.

OVER fifty hostess houses have been erected in the army training camps. At week-ends automobiles of friends and relatives swarm around these houses, and the men off duty are whirled away for a short spin.

YOU must admit that there is plenty of companionship in the Y. M. C. A. and Knights of Columbus clubhouses. Not much chance for a fellow to get lonesome with so many cheerful grins around.

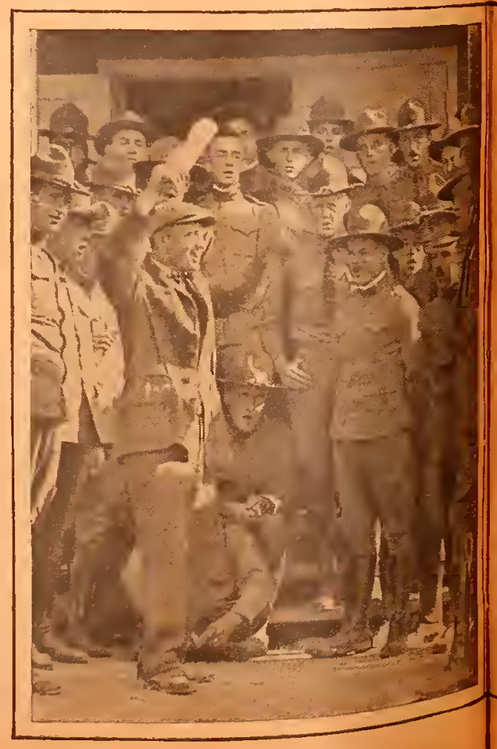
THE Y. W. C. A. Hostess House is one of the most popular buildings at Camp Funston. Here the boys in khaki can meet their mothers, sisters, and sweethearts. The ladyless group in the foreground, no doubt, has gathered around to envy the other fellows.



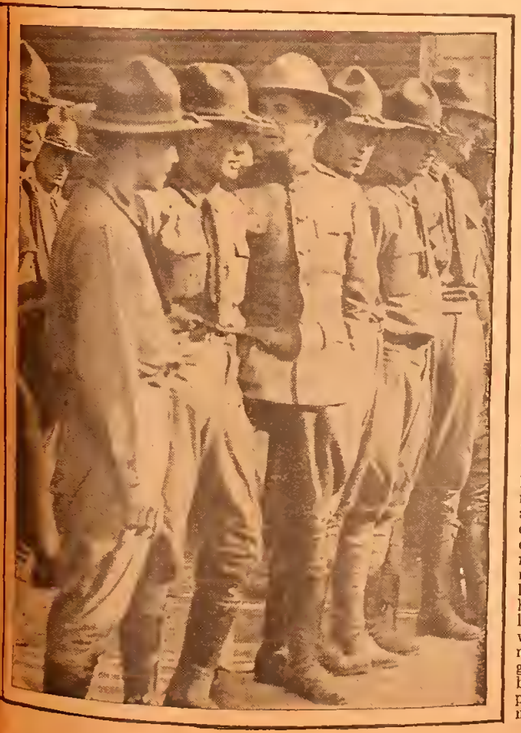
YOUR boy at the army cantonment is learning to do many things, besides being a soldier. Uncle Sam offers him an education, and he is attending classes as he would be if still in college.

DON'T forget that the soldier is as fond of a good book as the rest of us. The Y. M. C. A. library at a national army camp is a place that is never deserted, but is often overcrowded.

AN IMPORTANT individual at Camp Pike, Little Rock, Arkansas, is one Howard Kimsey, song leader. He takes his little "tabloid" organ around with him, and when the men need a rest he flops up the frame, slips in the words to "The Old Gray Mare" or "Over There" and they all join the chorus.



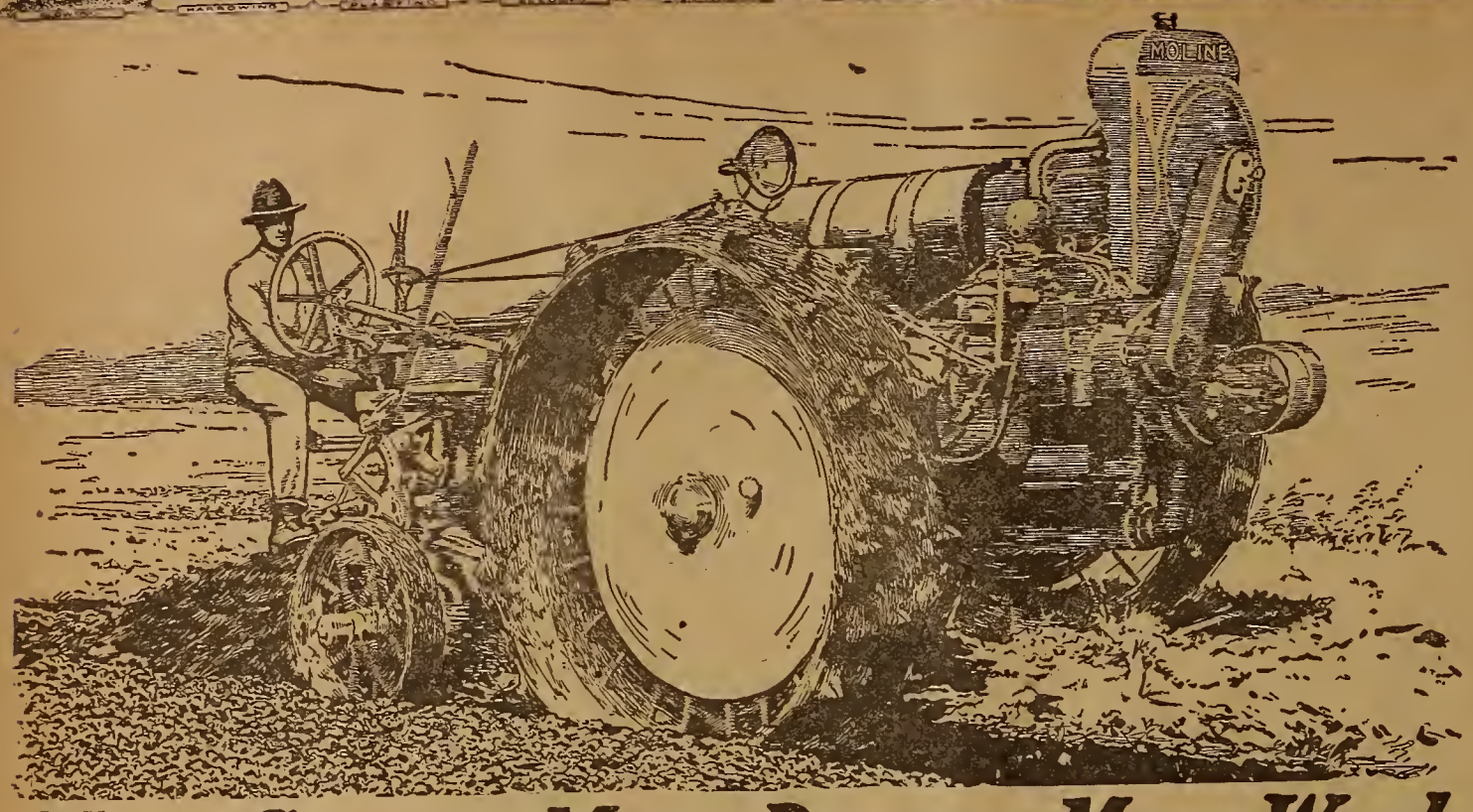
HOWEVER, Mr. Kimsey is not the only specimen we have of government song leaders. Here is one at Camp Gordon, Atlanta, Ga., helping these Southerners tune up. He is coaching this group of officers so they can lead their men in mass-singing while on a hike.



YES, he's always on hand to get his mail, so don't make him turn away empty-handed and down-hearted while the fellow next to him gets a nice, fat, gossipy letter from the home folks. Make him one of those who go off humming ragtime to grin over young brother's latest prank or sister's newest fad.

PERHAPS the most crowded hall on the camp grounds in the evening is the movie theatre. This theatre may not be luxuriously furnished, but the audience is just as attentive as though it reveled in cushion-backed seats.

ONE MAN OPERATES BOTH TRACTOR AND IMPLEMENT



More Speed-More Power-More Work

EVERY farmer who sees the new Moline-Universal Model D plowing is astonished at its speed, the splendid quality of work and the ease at which it operates. After seeing the Moline-Universal work, you will realize that the number of plows pulled is less important than the amount of work accomplished.

Great Capacity for Work

Speed, power and light weight are combined in the new Moline-Universal tractor to a remarkable degree. As a result, under any ordinary plowing conditions, the Moline-Universal pulling 2 plows at 3½ m.p.h. will plow 9 acres in a 10-hour day—equal to a 3-plow tractor traveling 2¼ m.p.h., the usual tractor speed. Thus the Moline-Universal gives you large capacity for heavy work, ample power for all belt work on the average farm, with these distinct advantages over other tractors—light weight; greater economy and ease of operation; ability to do all farm work, including cultivating, and ONE-MAN control of both tractor and implement from the seat of the implement, where he must sit in order to do good work.

Does Better Plowing

An advantage of speed plowing is the better quality of the work. With properly shaped moldboards and the Moline-Universal tractor plowing at 3½ m.p.h. the soil is more thoroughly pulverized and compacted than at slower speeds. It is left in such a level and fine condition that furrow marks are hard to distinguish.

Positive Reliability

And keep this in mind always—the Moline-Universal is built for positive reliability. The powerful 4-cylinder, overhead-valve, vibrationless engine delivers full 9 h.p. at drawbar and 18 h.p. on belt; unusually large bearings lubricated under 35 lbs. pressure; Remy electric starting, lighting and ignition system with governor generator; all moving parts completely enclosed; 15 Hyatt roller bearings; 5 adjustable ball thrust bearings; 7 splined shafts; differential lock; heat treated and steel cut gears—these give "positive reliability," and make the new Moline-Universal the best tractor money can buy.

Self Starter and Electric Lights

Self starter relieves the back breaking strain of cranking, makes tractor operation easy for non-robust help. In fact, many women and boys are successfully running Moline-Universal tractors. The self starter is a feature every overator will appreciate. Electric lights increase the working capacity of the Moline-Universal so that you can use the tractor night and day in the busy season. It gives you an emergency power always available to make up for any unavoidable delays.

Free Tractor Catalog

Your copy, of our new tractor catalog which completely describes the Moline-Universal Model D is now ready. A postal will bring it to you, also the name of your nearest dealer. Address Dept. 60.

Moline Plow Company
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Manufacturers of Quality Farm Implements Since 1865.

MOLINE UNIVERSAL TRACTOR
It Solves The Farm Help Problem

Machinery

The Tractor Way

By M. A. Morton

EVERY person who has worked from 4 to 6 horses on a gang plow, disk, harrow, drill, binder, or any other farm implement that requires lots of power knows what it means to get up in the morning to feed, curry, and harness these horses before breakfast. Then after breakfast these horses must be bridled and watered, and properly hitched to whatever machine is going to be used. This will take at least an hour in the morning, the reverse process at night the same time, and easily a half hour at noon. Two and one half hours a day, or fifteen

Cutting 25 acres a day will not tire nor overheat the tractor

hours a week, spent in looking after power alone. If the flies are bad or the day is hot and the horses are restless, our patience is about gone by night.

From constant practice, the natural horseman becomes quite proficient, and seldom thinks of the amount of time, care, and attention he devotes to the animal power on the farm. He doesn't realize the number of times a day the trace comes unhooked turning corners, nor the time wasted in allowing the team to rest or cool off.

There is no question but that half the time spent on a tractor capable of doing the same work would keep it in perfect running order, allowing more time to work in the field, and no time wasted.

When we become as accustomed to handling tractors as we are with horses, we will look back and wonder how we used to get along.

The Tractor on Muck Land

LAST spring I purchased a small 5-10 H. P. tractor. I have only nine acres of muck land, on which I raise celery, onions, and lettuce. I have used this tractor to do all my plowing and fitting the ground. It is cheaper to me than a team of horses, for the reason that its first cost is less than the upkeep. I use kerosene as a fuel, and 8 or 9 gallons a day is the average consumption.

Saving one man and eight horses

I use the tractor to haul my produce to the cars for shipment, and, in fact, have sold my horses, as the tractor more than takes their places. I was uncertain as to what would happen in the spring, when it was necessary for me to start work while the ground was still wet, but by putting extension rims on the wheels I got started just as soon as I could with horses.

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Dept. 27 Lincoln, Illinois

Dairying

Cottage Cheese

By J. B. Fitch

THE increased price and the shortage of certain foodstuffs are causing the housewife to pay more attention to the selection and utilization of foods in the home. One food which is coming to be appreciated as a cheap meat substitute is cottage cheese. This is one of the cheapest sources of protein that we can find, and it is generally made as a by-product of the farm or dairy, either as a means of disposing of sour milk or a surplus of skimmed milk.

Many people are of the opinion that when milk sours it is worthless as a food. The housewife may use it in cooking in cases where sour milk is called for, but more generally it is thrown away. On the farm the sour milk is fed to hogs or chickens, and is a valuable food for these animals; but sour whole milk or sour skimmed milk could be more profitably disposed of in the form of cottage cheese, and thereby furnish a palatable, wholesome substitute for meat that could be used by all. Of course, not all of the sour milk can be used as cottage cheese, but it should be more commonly used than at the present time.

Cottage cheese can be easily made in the home by using clabbered whole milk or clabbered skimmed milk. The cottage cheese from whole milk is better than that from skimmed milk because of the butterfat it contains; but it is also more expensive, and on this account skimmed milk is more generally used than whole millk.

The clabbered milk can be slowly heated to a temperature of 100° F., and held at this temperature for about five minutes. This heating will make the curd solid, and will cause the whey or liquid portion to drain off more readily. After heating, the whey can be separated from the curd by draining in a cheesecloth sack for five or ten minutes. The curd is then ready to salt and serve. The curd can be salted to suit the taste. If the curd is very dry, a little cream or milk added will make the cheese more palatable. If the cheese is to stand some time before being used it is best to add the cream just before serving.

Aside from being a cheap substitute for meat, the making of cottage cheese can be made a profitable side line for farmers who have a surplus of skimmed milk. One hundred pounds of skimmed milk will make about 15 pounds of cottage cheese, which, sold at 15 cents a pound, would make $2.25 a hundred pounds for skimmed milk, not counting the labor for making the cottage cheese.

Sweet Corn and Cows

By J. T. Raymond

SWEET CORN and dairying are the twin horses on which a number of Eastern farmers have ridden to independence. For the sweet corn there is a good market at canning factories, often sold to on contract. The cornstalks are put through cutters and stored in silos. Other parts of the farm produce hay for the dairy herd, which in turn furnishes year-round employment and year-round income, besides contributing to solve the fertilizer question.

John E. Potter was one farmer who made good with cows and sweet corn. Mr. Potter bought an intervale farm capable of carrying, at the time of purchase, 12 cows and 3 horses. In six years the same land carried 35 cows and 6 horses, and the retail sales of milk in town reached 450 quarts a day. He raised 20 acres of sweet corn. In one average year his sweet corn brought $2,000 in cash, and his milk $6,000. He doubled his barn room in these six years, built two silos, and cut off 50 acres of woodland for pasture.

Of course, a farming business of this type cannot be built up in every locality nor by every man. Canning factories are not always close at hand. Mr. Potter's farm was only a mile from town, so that it was possible to retail milk. Morever, he had lots of push and business ability. Given the proper business conditions—and they exist on hundreds of farms—sweet corn and dairy cows will make good.

Dehorning Calves

By Robert L. Winters

MANY dairymen object to the horns on dairy cattle, and practice dehorning the cattle they are to keep in their herds. The horns are of no value, and may be a source of injury to the cattle themselves and to the caretaker.

In the case of pure-bred cattle intended for show purposes it is advisable to leave well-shaped horns on the animals, as the horns add to the appearance of their heads. In some cases sales of animals might depend upon whether or not they have horns.

Dairymen who think the old-fashioned milking machine is hard to beat are willing to be shown a better way

In dehorning dairy animals the decrease in milk flow is not so great as commonly believed. In the case of one herd of 25 cows in milk which were dehorned, the milk flow was lowered for three days, but after this time became normal, and at the end of the first week after dehorning was slightly higher than the previous week, as shown by the daily milk sheet. The greatest difficulty in dehorning is getting the animal securely tied.

For this purpose a strong chute or cattle stocks should be used. It is best not to dehorn cows heavy in calf, as they may injure themselves in the chute. When the animal is securely tied the horns can be taken off by means of a special horn clipper, or sawed off with a sharp saw. In order to get a well-shaped poll and to insure against the horn growing again, one should so cut the horn that it will have a ring of hair when it is removed.

Should the animal bleed too freely, this can generally be successfully stopped by using pine tar and cotton. It is best to dehorn in the early spring or late fall, thus avoiding the danger that flies may cause to open wounds.

A more simple and humane method is to kill the horns on the young calf by means of caustic potash or caustic soda. This will also give the cattle a better shaped head. In using this method the calves must be treated before they are two weeks old, or at least while the little button-like growths are still very small and soft.

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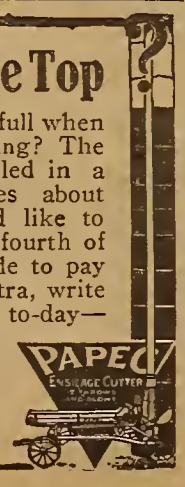

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Live Stock

Self-Fed Hogs

By James Smith

SELF-FEEDING of fattening hogs is rapidly increasing because of the scarcity of farm labor, the high prices of hogs, and the high prices of feed. Self-feeding experiments at the Kansas Experiment Station have given interesting results. Ninety Duroc-Jersey pigs were fattened for market. They were divided into fifteen lots, three of which were hand-fed and the others self-fed—some on pastures and others in dry lots.

The pigs were started in the experiment with an average weight of 50 pounds, and were fed to make an average gain of 150 pounds a pig for each lot. The self-fed pigs in the dry lots were ready for market earlier, required less labor, gave greater returns for the feed consumed, and based upon averages of the Kansas City market for the last five years would have sold for 25 cents more per hundredweight at the time they finished in the experiment.

Adding to the gain in the market price the saving in feed, which amounted to 99 cents a head, and the saving of labor, which at the lowest figure, when as many as a carload of hogs are fed, would amount to one hour a pig, there resulted a gain of about $1.63 a head.

The average self-feeder will accommodate at least 20 heads of pigs through a feeding period similar to the one in this experiment. With the advantage of $1.65 a head, $33 may be credited to the self-feeder above the net returns from 20 hand-fed pigs.

The self-fed pigs on alfalfa and rape pastures were ready for market only one and one-half days earlier than those on the dry lots, but the pasture allowed in three months a saving of 67½ cents' worth of concentrates to the pig. The pigs were pastured on alfalfa at the rate of 18 to the acre, which gave a surplus of forage. This shows a return of $12.15 an acre for alfalfa pasture. Two cuttings of hay had been removed before the feeding period began. Figuring on a five-months pasturing season, there is a return of $20.25 an acre.

The rape-pastured pigs were pastured at the rate of 24 to the acre, but with a slight shortage of rape during the latter part of the feeding period. Based upon the saving of concentrates, the rape pasture gave a return of $16.20 for the three-months feeding period. Figuring for a four-months pasturing season, there is a return of $21.60 an acre.

In testing the efficiency of concentrates when fed with alfalfa pasture to fattening pigs, it was found that corn, shorts, and tankage gave an advantage of $7.83 an acre when compared with corn, and $4.05 when compared with corn and shorts. These results are based upon pasturing at the rate of 18 pigs to the acre. The comparison of returns does not fully explain the advantage gained in the use of corn, shorts, and tankage with pasture. With this ration more pigs could have been pastured on an acre, while fewer than 18 pigs should have been pastured when corn alone was used.

The corn-fed pigs grazed closely, and practically ruined their pasture by rooting, while those in the corn, shorts, and tankage lots left an abundance of alfalfa and rooted little.

Another phase of self-feeding fattening hogs which demands consideration is the "free choice," or "cafeteria," system.

In this experiment the free-choice pigs in the dry lot made their average of 150 pounds gain at a cost of 18 cents less per pig than the dry-lot pigs with the mixed ration. This was done with a saving of eight days' time, which saved labor and enhanced their selling value, considering the average decline in the fall market price of hogs.

The results secured in the alfalfa lot are the reverse of those in dry lot. Evidently the pig's appetite is not the most efficient guide for balancing his ration when full fed on alfalfa pasture. His appetite for alfalfa seems to dull his instinct as a dietitian when helping himself at the self-feeder. He naturally has a pig's appetite for corn, and when this is satisfied on top of a good feed of alfalfa there isn't much room left for shorts and tankage. Not enough tankage is consumed to balance his ration properly, and as a result his gains are more costly and he gets to market behind the pig which is forced to eat shorts and tankage with his corn.

The Demand for Horses

By John Coleman

SOUND, good-looking, bold-going, easy-keeping, and durable heavy horses are in demand. Such horses not only meet the demands for efficiency and economy in farming operations, but also sell high on the open market, leaving a good profit above the cost of production.

There are farms where motive power costs absolutely nothing. Big, active horses are raised and used on these farms. They are broken to harness during the winter before they reach three years of age. The geldings are sent to market when they are five or six years old, to make room for younger horses. The increase in value between the time they are broken and the time they are sold will usually pay for their feed, making the service they have rendered cost nothing.

The motive power on many farms is the most expensive item. On such farms one usually finds poor management and carelessness on the part of the owner, for which there is practically no demand at any market price.

In the future no one can afford to raise an inferior horse, because he is no longer a staple product. We have been fortunate in being able to dispose of several hundred thousand horses of this kind for war purposes. This is only a temporary demand, for the army type of horse is not a desirable farm or commercial horse.

This 22-year-old horse, owned by M. E. Roundy of Kane County, Utah, still works on the farm on which it was born

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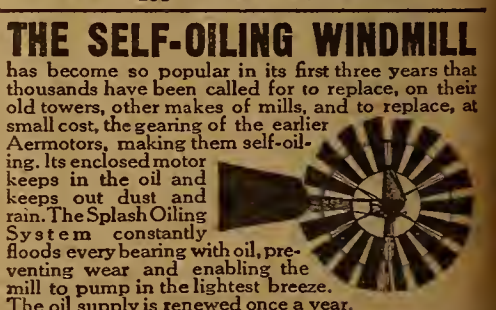
Hess-Bright Ball Bearings



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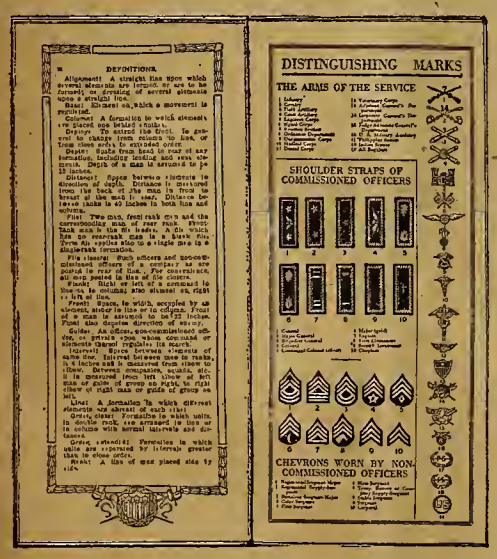

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It contains the rudiments of military instruction. It will give you a working knowledge of military matters.

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Army Organization—Regular Army, National Guard; National Army, Reserves.
Branches—Infantry, Cavalry, Field and Coast Artillery, Signal Corps, etc.
Ranks and Grades—Commissioned and Non-Commissioned Officers. How They are Graded.
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Drying Vegetables and Fruits for Winter Use

The community drier helps many women save time, energy, and expense in preserving their garden and orchard products

By R. P. Crawford

INSTEAD of spending time and energy in canning their surplus supply of vegetables and fruits, the women in nearly a dozen communities in the Middle West last summer had only to take it to a near-by community drier and leave it for a few hours, when it would be dried and preserved for winter use. And all for a charge of from two to five cents a tray.

A threatened shortage of glass jars in some sections, the press of time in every farm and city home, and the need of conserving every possible bit of produce were factors that made for the success of the work. And the interesting point is that it is estimated that nearly one hundred of these community drying plants, designed on the same plan, will be in operation before this summer is over.

Drying plants of various sorts had been suggested at the beginning of last summer as suitable for caring for surplus vegetables and fruits. Some were simple, consisting only of trays to be hung over the kitchen stove, others were more expensive—elaborate drying cabinets utilizing artificial heat, and there were outfits making use of an electric fan and special equipment. Some outfits meant considerable initial expense, and some suggested plants did not seem to be really practical when it came to turning out a first-class product.

C. W. Pugsley, director of agricultural extension in the University of Nebraska, put all of these ideas together and developed a community drying plant. It was to be expensive and stable enough to do the same work as the large commercial plant, and was designed to be used by an entire community.

One of the first plants of this sort was established in June, 1917, in North Lincoln, a community in the outskirts of the Nebraska capital, at a cost of approximately $250. So successful did this plant prove that closely following came plants in University Place, Omaha, and Fremont, Nebraska, and Glidden and Council Bluffs, Iowa, as well as in other near-by States.

How successful these driers proved during the summer may be judged from the fact that at the pioneer plant in Lincoln, 1,180 trays of fruits and vegetables were dried during the fifteen weeks from June 24th to October 8th. Seventy-five families made use of the drier. The plant at Fremont handled 150 bushels of fruits and vegetables, a total of 1,536 trays. People came from the entire surrounding country, scores coming 20 to 30 miles.

From the time it was opened, on July 23d, the machine was kept going night and day until fall, with the exception of one day, when it was closed down for repairs. At Glidden, Iowa, the drier proved entirely too small, and Mayor R. A. Hamilton of that town recommended that the capacity of the plant be tripled for this year.

All sorts of vegetables and fruits were handled. The variety of material is apparent from the following summary of products which were dried at the Lincoln plant: Peas, beans, asparagus, potatoes, parsley, spinach, carrots, onions, squash, pumpkin, eggplant, turnips, sage, beet greens, wild greens, cabbage, peppers, corn, tomatoes, celery, kohl-rabi, Swiss chard, yams, small berries, cherries, apples, elderberries apricots, peaches, currants, and gooseberries.

The typical community drier consists of a long box-like compartment, about four feet high and three feet wide, and generally about sixteen feet long. At one end of the drier is a screen and at the other end is a fan designed to draw the air from the fruits and vegetables. The principle consists in drawing the air over the vegetables in the compartment, thereby removing it as fast as it becomes saturated.

The vegetables and fruits are placed in trays built of screening with wood edges, about three feet long and eighteen inches wide. There is a small ledge of screen at one end, while the other end is left open, so that the air may easily be drawn through the trays. The screen bottom and sides are covered with a very thin coating of paraffin which prevents the products from sticking while in the drier. The standard drier has five compartments and holds one hundred trays.

The fan is generally operated by an electric motor, although a gasoline engine can be used as well when a motor is not available. The important point is to see that the fan has sufficient suction to draw the air swiftly from the trays. The fan should be of a large type, capable of changing the air in the cabinet approximately seventy-five times a minute. At one of the plants a fan formerly used in a planing mill for drawing off the sawdust was installed, while another plant utilized a fan that had been used in a foundry for drawing off the gases.

Only such products, of course, as are in prime condition for immediate service on the table should be dried. Before being dried, all fruits and vegetables are cut into thin slices, the object being to expose the inner cells to the air currents as much as possible. Generally, slicing machines, such as are used for cutting dried beef and bread, are suitable for this work, and can be purchased for from $2 to $10. The sliced fruits and vegetables are simply spread out on the trays and placed in the drier.

Apples are prone to discolor in the process of drying. In such case it is best to treat the slices with a salt solution before drying. Two or three teaspoonfuls of salt to a quart of water are sufficient for this work.

It has also been found that Irish potatoes discolor somewhat, and usually should be cooked before drying, either by boiling or steaming. It is unwise, however, to dry any material, such as potatoes, which can just as well be stored in the cellar. This particularly applies to all root crops.

Corn has proved very popular for drying. At Fremont 91 bushels were handled in the community drier. It is wise to set the milk by boiling the corn for three minutes and then plunging it in cold water before cutting and placing it in the drier. Dried corn has been found superior to canned corn and has proved just as good and fresh. Many who tried the process will can no corn at all next season.

Usually no heat should be used in the drying process. It has been found in tests conducted in Nebraska that where no heat is used in connection with the drier the product has a more natural taste. The only exception to the rule would be in the case of moist or humid weather, or a rainy climate. Then the best plan is to heat the room in which the drier is located. Care should be exercised not to have the fire too close to the drier, since the strong draft might easily set the framework afire. If the temperature goes much above 115 or 120 degrees, the products discolor and the flavor is lost. It generally takes about twenty-four hours to dry a tray of vegetables or fruit.

During the drying process care should be taken to prevent moths from laying eggs on the product. This is extremely unlikely while the drier is in active operation, but if the product is left exposed there is some risk.

The next point is to see that the product has been thoroughly dried. This is accomplished by placing it in a jar or other container the top of which is covered with a tight-fitting cloth or screen. If after a couple of days there is no evidence of moisture, the product should be removed and then packed in permanent receptacles. Tin cans, glass jars, or paraffined bags or boxes can be used with success anywhere.

To prepare the dried products for cooking it is only necessary to soak them in water, preferably overnight, to restore the water which was removed in drying.

The drying plants established last summer were under the supervision of a club, or in some cases the town itself. The charge of two to five cents a tray went toward the operating expenses. Usually a woman was secured to look after the plant at certain hours of the day and paid a small salary from the proceeds.

This club, located at North Lincoln, Nebraska, sponsored one of the first drying plants in the United States

Machines used for cutting dried beef or bread are suitable for slicing vegetables and fruits

Little Points in Canning

By Katharine Webb

KEEP the water at a jumping boil and do not allow the fire to die down for an instant while cans are in the canner.

Keep the cover on the canner during every moment of the processing time. Steam plays a large part in cooking the contents of the can.

Greens or green vegetables are most satisfactorily blanched in steam instead of hot water. Use a steam cooker or put the products in a colander and set them over a vessel of boiling water, covered tightly.

To prevent bleaching or darkening of products packed in glass jars, wrap jars in paper.

Examine jars and cans occasionally during the summer to detect any sign of fermentation, leaking, or swelling.

The flavor is often injured by letting peeled fruit stand too long before cooking. Prepare at one time only as many cans as can be processed immediately.

In seasoning it should be kept in mind that most vegetables, as well as meats, are injured in flavor by an excessive use of salt in the canning process. A little salt is very palatable, but it is better to add no salt in canning than to use too much. It can be added to suit the taste when the canned products are served.

Mold may develop on canned goods if the seal is defective, if after sterilizing the tops are removed from the jars to replace the rubber rings, and if the jars are kept in a damp place where the rubbers may decompose.

Good-Health Talks

By David E. Spahr, M. D.

MANY cases of prostrations from heat will occur during the summer. It would be well for us to know that these cases fall into two different classes. We have the cases that are suddenly stricken down like apoplexy, with a bounding pulse, high fever, and deep unconsciousness. Then there are the cases of heat exhaustion that may come on in the night like a great prostration, with a weak, oppressed pulse and a cold clammy perspiration, the comatose condition not being so profound or continuous.

It is important that we understand these conditions, because the treatment of these cases is decidedly different. The first case, with the high fever and bounding pulse, requires applications of ice to the head and heat to the feet, the other may need stimulation and heart tonics. Owing to the importance of distinguishing between these conditions, we should without a moment's delay call a physician, in order that our first aid should be beneficial and not injurious.

Freckle Remover

Please give me a harmless remedy for removing freckles.
Mrs. E. C. C., New Mexico.

TRY the following lotion: bismuth subnitrate, 2 drams; unguentum simplex, 2 ounces. Mix and apply to the skin at night, and remove in the morning, previous to washing, with a little cold cream.

Eczema

Is there a special diet for people who have eczema?
Mrs. H. G. D., New Hampshire.

PERSONS afflicted with chronic eczema should avoid fats, starches, and coffee.

Pinched Finger

In my work as a machinist and engineer I often pinch my fingers. What first treatment should I give them?
J. K., California.

WHEN a finger has been severely pinched, plunge it into water, as hot as can be borne, as this will lessen the pain and prevent the throbbing.

Talks in Sleep

Will you please tell me what would be good for a person who talks in his sleep?
B. K., Kansas.

STIR up your liver with a good cathartic. Eliminate all the poisons from your system. Do not eat any supper, or at least only a light one very early. Take a rest and change for a few weeks, and do not work so hard. Sleep on a hard bed with light covering.

Myalgia

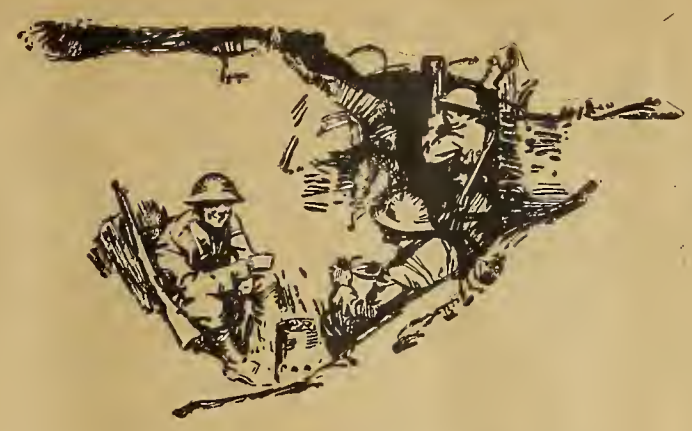
I have pains in my chest. My doctor says I have myalgia. What is it?
I. T., Louisiana.

A PAINFUL condition of the voluntary muscles, which may be due to a slight strain, a twist, or a laceration. It also may be caused by infectious diseases, such as malaria, or might be due to such drugs as alcohol or to lead in the system. It is sometimes called pseudo-rheumatism by physicians.

Violent Attacks of Hiccoughs

I sometimes have violent attacks of hiccoughs. What is the best thing to be done?
G. M. B., Iowa.

THE most stubborn attack will yield almost invariably to this simple procedure: Completely empty the lungs of air, then sip slowly eight or ten mouthfuls of very cold water, no air being inhaled until the last sip is taken. The nostrils and ears should be closed meanwhile by pressure with the finger tips. After the last sip a full inspiration is taken and the pressure removed from the ears and nostrils. This procedure has proved remedial when life was in danger.



How the Armies' need for meat was answered

IN a fighting man's ration, meat is the important item. Twenty ounces of fresh beef, or its equivalent, is called for daily.

To supply the meat needs of an army that was suddenly expanded from 100,000 to 1,500,000 is a tremendous task. Added to the needs of the Allies, it is a staggering one.

The American stockman and the American packer may justly take pride in the way they have met these needs.

During 1917, stockmen sent to market nearly 2,000,000 more cattle than during 1916. Yet at the end of 1917, the Department of Agriculture reports more cattle remaining on American farms than at the beginning of the year. The production of hogs has also been increasing. All of this in spite of high feed prices, and scarcity of labor.

How the packers have done their part is shown by the fact that in one week, Swift & Company was called upon to supply the Allies and the American Armies abroad 24,000,000 pounds of meat and fat—enough to have fed America's peace-time army for more than six months.

An order of this size means the dressing of 13,000 cattle and 200,000 hogs.

To move the finished products, 800 freight cars were needed. Of these 650 were from the Swift refrigerator fleet.

Three days after the order was received by Swift & Company, shipments began, and the entire amount was rolling seaward within a week.

Since January 1, 1918, over 400 carloads of our products per week have been shipped abroad on war requirements.

The nation's meat supply machinery has stood the test.

Not once has there been a failure on the part of the American farmer or the American packer to supply the government's needs.

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Swift & Company, U.S.A.

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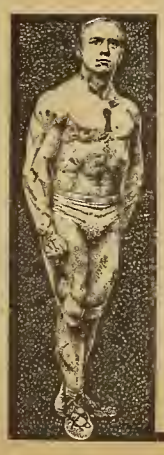
OH, YOU SKINNY!



Why stay thin as a rail? You don't have to! And you don't have to go through life with a chest that the tailor gives you; with arms of childish strength; with legs you can hardly stand on. And what about that stomach that flinches every time you try a squars meal? Are you a pill-feeder?

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Curiosity Traps Rings Raccoon

By F. E. BRIMMER

RINGS RACCOON never forgot the lesson of caution which the mussel clam taught him by pinching his toes. What a scare that was! And how very thankful everyone had been that it was not one of Old Mike's traps! From that day forth Rings Raccoon had always been most cautious in his hunting, fishing, and journeying.

It was nearly winter now, and the Raccoon family had been widely scattered, some by dogs and moonlight hunters, others had felt the rovers' call and had departed to find adventures in new swamps. Of course the youngsters were now nearly full-grown, well versed in wood ways by the careful training of Moms and Pops Raccoon, and hence able to take care of themselves.

Rings chose to remain on the old hunting and fishing grounds. There was a keen fascination for him in the way he was able to foil Old Mike and his traps. The lesson of caution, together with the fact that he was larger, stronger, and smarter than the others, had made him so crafty and cunning that all the wiles of the trapper's art could not catch him.

Never a step did he take until his delicate black nose had tried the ground just where he would put his foot. If the scent of a steel trap reached him, he sprang off to one side. Seldom did he follow the beaten trails, but went from stream to stream by some new route each time. If he smelled a delicious dinner at some favorite set, he would cautiously investigate.

One day he scented a young partridge and found that Old Mike had hung it temptingly from a tree—with three traps hidden beneath it in the mud! The mussel clam taught Rings that if he took hold from the bottom there was no danger, so he probed under each trap in the slime, dragging it out from under the bird, and then enjoyed a hearty meal at the expense of the old trapper.

Once he was attracted to a cunning water set by the delicious odor of fish oil. The nice smelling stuff had been smeared on a sod which formed a little island in the center of a small pool. To help him get to that bait Rings saw a tiny sod projecting just above the surface at a very convenient distance from the shore, just right for him to step on. But caution said, "No!" And well it was for him that he obeyed that subtle sixth sense, for underneath that little sod was a waiting steel trap.

FOR every ounce of caution Rings possessed a pound of curiosity. Every little sparkling icicle had to be carefully investigated, even at the risk of falling from the rock on which it glistened in the moonlight. Each stranger who came through the hunting ground must be followed for many miles, his actions noted, his path snuffed dry of scent. If any commotion arose in the woods, Rings must rush first to see what it was about. He spent hours peering into the dark pool where he saw and wondered at the reflection of the moon. An unfamiliar aroma would drive him simply wild with eagerness to find what it could mean.

"Say! Say!" cried Jackee Jay one cold morning. "I've found the most interesting thing!"

"Where?" eagerly quizzed Rings, for he and Jackee Jay were the best of friends, and what one could not discover on the ground the other could from his path through the air. Nothing in the woods escaped them, for one hunted by day and the other at night. Mornings they searched about together.

"Over by the old swamp," rattled Jackee as he burst away, with Rings a lively and eager follower upon the ground below.

"What does it smell like?" panted Rings.

"Jayee! Jayee!" laughed Jackee. "How do I know? That's for you to say."

"Well, how does it look?" persisted Rings.

"I think it's some scheme of Old Mike," replied Jackee, as he darted here and there, always keeping just over his companion's head. "The most horrible thing I ever saw! Racer Rabbit's dead body hangs head downward, and the funniest bright something hangs above him."

"Let's hustle faster!" cried Rings as he bounded here and there among the rocks, always keeping directly under his leader.

"Racer's body is all black like the logs where the fire went through, and the shiny thing above him swings and flashes in the wind," chattered Jackee to the eager ears below him.

Old Mike had tried in vain every known set for the cautious Rings, and when he remembered one day how curious the Raccoon family was he devised a new set. He had placed the rabbit's body on a pole, then touched a match to the dry fur, which burned with a rank repugnance. Over the top of the pole a bright tin can was placed, and in the mud near-by he half hid a foul-smelling steel trap, bottom side up.

WHEN Jackee Jay and Rings Raccoon arrived at the old swamp, the inquisitive Jackee perched upon a limb and surveyed the unusual sight.

"Whew!" sniffed Rings, cautiously approaching the charred body of Racer Rabbit. "Trap here all right, and Old Mike hasn't even smoked it to deaden the scent."

Round and round the pole he circled slowly.

"Only one trap," he announced, "and that one isn't half covered. Ho! Ho! What a fool the trapper is!"

Rings came near the place where the trap was hidden and looked about carefully. He decided to spring the trap and then investigate the funny sight more carefully. True there was nothing that smelled good to eat and not a thing but empty curiosity to satisfy by the risk he was taking.

Slowly he thrust his hand-like paws beneath the trap, raised them carefully until he felt the hard steel, then started to drag the trap out of his way—just as he had fooled Old Mike many times before. But this time the trap was upside down and his paw grasped the tricky pan which springs it.

Snap! Jerk! Rings was a prisoner. His insatiable curiosity had trapped him at last.

Bite and pull as hard as he would, there was no use. No mussel clam held his aching toes this time. Tired and discouraged at last, he gave up his frantic efforts and looked about for his companion.

Just at that moment Jackee Jay swooped down with the scream, "Old Mike is coming! Old Mike is coming!"

A smile of glee distorted the face of the old trapper when he discovered his good luck.

"Here, you young rascal!" he shouted merrily, pulling the trap and captive toward him with a yank of the chain. "You'll never trouble me again with your smarty pranks."

Suddenly the trapper raised himself erect and gazed down intently at poor Rings.

"Wall, wall!" he shouted. "A 'coon with eight rings as sure as I live! You're wuth more alive than dead."

So Rings found himself inside a dirty sack, swinging over the shoulder of his chuckling captor.

New Puzzles

Half-Square

One third of ten; an assertive verb; the front; a particle; grants.

Numerical

7-3-5-4 the message; 10-3-1 a cry of animal in distress:
9 a vowel; for 11-7-3-6-14 a sudden illness guess;
The whole is often criticized, but should be less.

Answers to Puzzle

Printed Last Issue

Word Square

Rabbi, allot, blasé, bosom, items:

R A B B I
A L L O T
B L A S É
B O S O M
I T E M S

A Food Survey of the Home

U. S. FOOD ADMINISTRATION

THE real work of woman since we entered the war has been conservation. We must hold every position we took last year and go forward to new ground this year. A food survey to determine the year's needs will help. Why not back up your gardening plan with a cellar and pantry plan?

How many potatoes and how many beans will you need? How many jars of tomatoes and how many of peaches? Sit down with pencil and paper and make a definite plan, remembering that every woman's real war work is to make the home pantry as independent as possible of the world pantry.

Take stock of what you used last winter and of what you have left on hand. Make an estimate of your grocery orders for last winter, and plan this year to reduce these to a minimum by substituting your own products. For instance, for

sugar substitute sorghum syrup and honey if they are available; for candy, home-made crystallized fruits and fruit pastes; for tropical fruits, native fruits; for Brazil nuts, walnuts and hickory nuts; for canned meats, home-canned meats; for shipped breadstuffs, neighborhood meals and flours.

To sum it all up, stop eating freight. Transportation is the greatest problem of the war, and shipping space the most precious thing in all the world. Above all—don't eat from the pantry of the hungry Allies! With a little planning and much hard work you can fill your pantry with home-grown foods.

Before giving up this survey, exhaust all home resources, then extend your survey to the neighborhood in a five, ten, or fifteen mile circuit, according to circumstances, and plan to eat home products.

Last fall one woman who made a survey of a five-mile circuit found that she could get cornmeal, buckwheat, and whole wheat flour from a neighboring mill. She canvassed the farmers and contracted for a winter supply of chickens, ducks, turkeys, guineas, and rabbits, a small quantity of bacon and sausage, and even fresh fish and eels.

When neighboring farmers killed a beef she bought a quarter, treated the family to fresh beef, and canned and corned the rest. The sugar supply of her family of six she cut down to 10 pounds a month, and pieced out this allowance with neighborhood sorghum and honey.

During the long hard winter her only call on the overburdened railroad was for a little sugar, coffee, vegetable fats, and seasonings. This was practical conservation. She relieved the railroads of useless transportation, saved the labor of many hands, developed the resources of her own community, and fed her family better than usual.

New Less-Wheat Recipes

COMBINATION MUFFINS—One cup milk, one tablespoon fat, two tablespoons syrup, two eggs, four teaspoons baking powder, one teaspoon salt, three-fourths cup ground rolled oats, one cup corn flour. Add to the cup of milk the melted fat, syrup, and slightly beaten egg. Sift the salt, baking powder, and flour together. Use a coarse sieve so that no part of the flour is wasted. Combine the two mixtures, stirring lightly without beating. Bake in a hot oven from twenty to thirty minutes, depending upon the size of the muffins.

OATMEAL BETTY—Two cups cooked oatmeal, four apples cut up small, one-half cup raisins, one-half cup sugar, one-quarter teaspoon cinnamon. Mix and bake for half an hour. Serve hot or cold. Any dried or fresh fruits, dates, or ground peanuts may be used instead of apples. Will serve five people.

OATMEAL MUFFINS—One cup milk, one tablespoon fat, two tablespoons syrup, one egg, one teaspoon salt, four teaspoons baking powder, one-half cup wheat flour, one and one-fourth cups oatmeal. Sift the salt, baking powder, and the flour together; mix in the oatmeal. Add to the cup of milk the melted fat, syrup, and beaten egg. Combine these two mixtures, stirring lightly without beating. Bake about thirty minutes in a moderately hot oven. Use granulated oatmeal or put rolled oats through food chopper.

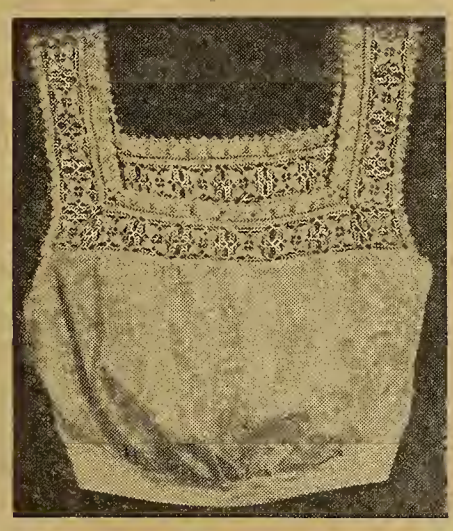
CORN-RICE MUFFINS—One cup cornmeal, one cup boiled rice, one cup milk, one tablespoor. fat, one teaspoon salt, two teaspoons baking powder, two eggs. Mix cornmeal, rice, milk and shortening together; beat five minutes; then add well-beaten eggs, beat two minutes, and add baking powder. Bake in hot greased muffin tins or in shallow pan. Boiled hominy may be used in the above recipe instead of rice.

GINGERBREAD—One cup cornmeal, one cup wheat flour, two teaspoons cinnamon, two teaspoons ginger, one-half teaspoon salt, one teaspoon baking powder, one teaspoon baking soda, one cup molasses, one cup sour milk or buttermilk, two tablespoons fat. Sift the dry ingredients and add molasses, milk, and fat. Beat well, and pour into a greased pan. Bake twenty-five minutes. Notice that this recipe uses cornmeal for half the wheat flour ordinarily used.

CORN-FLOUR SPONGE CAKE—One cup corn flour, one cup sugar, four eggs, two tablespoons lemon juice, one-eighth teaspoon salt. Separate whites and yolks. Beat the yolks until thick and light lemon color. Beat sugar into the stiffened yolks, and add the lemon juice. Fold in alternately the stiffly beaten whites and flour. Bake in an ungreased pan for thirty-five to forty minutes. Start in a moderate oven, and when about half done raise the temperature to that of a hot oven.

CORN PICKLE—Two quarts green corn, two quarts beans, two quarts chopped cabbage, two quarts chopped cucumbers, one quart chopped green peppers, two quarts chopped green tomatoes, two ounces mustard seed, two ounces celery seed, four cups sugar, eight cups vinegar, salt to taste. Cook the vegetables separately until they begin to get tender, then drain. Put all together with the other ingredients into a saucepan, and cook for one and one-half hours. Seal in jars. The beans may be either fresh or dried.

Star-Leaf Yokes



FOR complete directions for making this attractive yoke and the one shown above on the model, send four cents in stamps to the Fancy-Work Editor, Farm and Fireside, Springfield, Ohio. Order No. FC-106.

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Every telephone connection requires co-operation. The slightest inattention or indifference on the part of the person who calls, or the company that makes the connection, or the person who is called results in a corresponding deficiency in service. Each is equally responsible for the success of the service.

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Efficient telephone operation is vital to the war work of this country. The army, the navy and the myriad industries contributing supplies depend on the telephone. It must be ready for instant and universal use. The millions of telephone users are inseparable parts of the Bell System, and all should patriotically contribute to the success of the service.

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Nujol *for constipation*

"Regular as Clockwork"

A Black Cat for Luck

[CONTINUED FROM PAGE 6]

dimple, O'Hagan almost forgot to wonder how much longer his promised wife intended to keep on dancing with that "fresh gink."

No suspicion of his sweetheart's loyalty entered O'Hagan's honest mind, however, when other evenings proved to be only a repetition of the first. He thought it natural that a pretty girl should prefer fox-trotting with so accomplished a partner as Mr. Fink to sitting tamely at the side of a disabled lover. But Mary Maloney, shocked at what seemed to her callous cruelty, ventured to remonstrate with Pearl, and Pearl fiercely resented what she termed her friend's "freshness" in "buttin' in."

Two weeks later O'Hagan entered the stuffy parlor of the Dailey flat wearing an oddly stirred and excited look.

"It's us for Coney Island to-night, Pearl," he announced.

Pearl protested vehemently. It was a warm June night, but she preferred a cabaret to a Sound steamer. However, the quiet firmness which the big policeman could exert when he chose was seen in the manner in which he not only carried his point, but also defeated Mr. Fink's attempt to monopolize Miss Dailey.

"Not to-night, Fink," O'Hagan said pleasantly. "I got somethin' I want to talk over with Pearl."

OUT of earshot, but in plain sight, O'Hagan drew a newspaper from his pocket and directed Miss Dailey's attention to a certain paragraph with a big, clumsy finger. Then he said something to which she evidently objected violently. And so it went on, the man explaining, persuading, pleading, the girl at first angrily voluble, then sullenly silent.

Presently O'Hagan left her and after curtly informing Mr. Fink that he could join Miss Dailey, sat down by Mary with a heavy sigh.

"Well, Mary, it's all over between me an' Pearl," he said slowly.

"Oh, no, no!" gasped the girl. "Don't give up, Tim. She'll be sorry to-morrow."

"It's all over," O'Hagan reiterated grimly. "You'd oughta heard the way she knocked Strike."

"W-what's Strike got to do with it?" Mary asked dazedly.

"Why, Mary, I told you about Strike, an' how kinda worried I was on account of not gettin' to see him before I come away," O'Hagan reminded her somewhat reproachfully, for her sympathy had been most comforting. "And there was a piece in the New York 'American' to-night askin' where was Tim O'Hagan, the big motor cop. You see, the boys don't know what hotel I'm stoppin' at, an' I ain't been writin' to nobody on account of me hand. And the paper says," the man went on huskily, "there's a black cat in Chicago that's dyin' for want of a sight of him."

"Ah, think of that now—the poor kitty!" exclaimed little Mary, aghast. "When do you start, Tim?"

"At noon to-morrow," O'Hagan said with decision. "But Pearl kicked somethin' fierce when I showed her the paper an' asked would she go with me. We could get a license an' be married in the mornin'; but, gee, you'd think I was askin' her to jump off Brooklyn Bridge."

"It must of kinda upset her. Pearl is crazy about New York, and she wasn't expectin' to leave for more than a month yet. You let me talk to her, Tim."

She rose impulsively, but a firm hand pressed her gently down again.

"Not on your life!" O'Hagan said quickly. "Pearl's thrown me down twice, an' that's a-plenty."

"But she—she can't mean it," Mary stammered.

"She means it all right," O'Hagan said with amazing resignation. "And I sure don't want to marry a girl who has no use for cats."

Their eyes met, and a beautiful color flooded Mary's pale face at the remembrance of their first meeting, when the tall lad attacked single-handed a crowd of young toughs who were tormenting a helpless kitten, in spite of the frantic efforts of a small girl to rescue it. O'Hagan had not forgotten, either.

"Gee! How you did stand up to them toughs, tryin' to fight 'em for the sake of a bit of a kitten! I guess *you* know, Mary, how I feel about Strike."

She murmured something inarticulately. And then the miracle happened. Looking deep into those wide, pitiful gray eyes the big man asked himself suddenly how he could ever have cared for pretty, selfish Pearl Dailey after having known this brave little pal of his. What a fool, what a bonehead, he had been!

"Oh, Mary, you sure are a dear little thing!" he murmured half under his breath.

Then as the lovely color in her cheeks deepened, O'Hagan said daringly:

"Mary—Mary dearie, will you let me get the license for *us*, and go with me to-morrow? Wait, don't speak yet," he begged. "If you'll trust me I'll take you straight to me sister Katy and court you as never a girl was courted before until—until you say you like me well enough to set up housekeepin' with me—and Strike."

The laugh with which he concluded was shaky, even abject, for the hero of the Sunday papers was humbly unaware that little Mary's heart had been his ever since that far-off day when he had won a fight for a small girl and a forlorn yellow kitten. There was a pregnant silence, and then Mary asked tremulously:

"Do—do you think you could ever forget her—if—if I did marry you, Tim?"

"I've forgot her already," O'Hagan shouted from the depths of an honest conviction.

A great passion of longing to touch those smooth braids of bright hair, to press his lips to that sweet girl mouth, shook his mighty frame. But O'Hagan was one of nature's gentlemen, and he only laid his big hand on her small cold one with protecting gentleness.

"I ain't even goin' to ask you for a kiss, Mary—yet," he said. "Not till I get you a diamond engagement ring, anyhow," he added, showing his white teeth in a joyous laugh. "We're goin' to be married to-morrow, Mary mavourneen; but you ain't goin' to miss nothin' by bein' married first an' courted afterward."

Thirty-six hours later, back at headquarters in Chicago, O'Hagan was confiding in an emaciated black cat which was purring contentedly on his mighty shoulder.

"It sure is a black cat for luck, old boy. It's you that saved me from gettin' tied up to Pearl Dailey.

"But you butted in just in time, old fellow, an' now I'm married to little Mary." He buried his face in his dumb friend's soft fur as he whispered: "And she's the girl, Strike, to make home heaven for an old scarecrow of a black cat and a big bonehead of a motor cop. It's no dream, Strike, neither, for—listen now—before I come up here to report for duty she put her two arms around me neck and kissed me of her own free will. What d'you think of that, you old mascot, you?"

Bagging a Hun Over London

[CONTINUED FROM PAGE 3]

he said. "Go up and be a hero. Good luck!"

The machinists drew out the chocks. I taxied across the field to a good start, and climbed to about 500 feet. Five minutes later I was at Hendon, where I came down in the field. The orderly officer was waiting and ran up to meet the machine.

"All we can tell you," he said, "is that the enemy machines are flying high. It is advisable to climb straight up and a bit to the east. Good luck, boy!"

Just as my propeller began to hum again I heard some one yell, "Wot's yer fav'rite flower, Bill?"

I pointed the machine's nose straight up, at the best climbing angle. We didn't spiral; we went straight; I was in a hurry. In ten minutes I had reached 10,000 feet. I kept right on to 15,000 feet.

Once we had reached that level, Low unbuckled his belt and stood up to get a better view. It's a strange thing, but there's a sort of telepathic connection between the men on a plane. If the pilot gets his "wind up," as they say,—gets worried about anything—his gunner will sense it too. Well, in a moment Low sighted the enemy machines off to the northeast, and pointed them out to me.

Let me tell you that was a great sight! Thirty-one big Gothas in a huge V formation. There were three other machines by themselves off to the left. Those were BE 12's of the patrol, and they were the only other British planes that I saw. Other English machines were coming up as I was, but they didn't have a chance against the Gothas, because they were under-gunned and couldn't make any better speed than the Hun.

Soon as I got a good look at that gang I said to myself, "You'd better get higher, old man." And so I began again to climb. I rose to between 17,000 and 18,000 feet. Low took off his heavy gloves, leaving on only his thin under-gloves so he could work the Lewis. He whipped off his goggles.

Somewhere below 18,000 feet I altered my tail plane to horizontal, and steered in a semi-circle around the oncoming formation of Gothas, planning to attack the stragglers. They were traveling with the point of the wedge in the rear. I estimated the front rank to be about 15,000 feet up and each rank behind about 100 feet higher, in order to neutralize the effect of our Archies, from the ground.

There were four Gothas lagging behind all the rest, and I made for the hindmost of these, diving on him from about 500 yards above him. As we came within 50 yards of him I turned loose both my synchronized Vickers guns, which I worked with what we called a "joystick." When I was within 20 yards of his tail, going like a streak, he went into a "spin" and I turned to climb for the next Gotha. As we were turning, Low emptied a drum from his Lewis gun into the falling German for good measure.

All this happened in much less than a minute. A minute is a million years in a position like that. I only fired about 25 rounds from each gun at that first chap. I was figuring on saving some ammunition for the others.

WHEN I had climbed about 500 feet I dived for the next Gotha. I failed to get him, but did the best thing I could think of. I made a sharp turn to my left and downward with all speed on, and then came up behind the Hun from underneath.

I thought I'd get his blind side if I attacked from beneath, for, as I told you, I didn't know then about the gun tunnel in the rear of his Gotha. I got the surprise of my life as I came up to him, when he opened fire on me with a gun under his tail. I emptied both my guns at him, without effect as I could see, although I thought I could observe holes ripped in his planes by my bullets.

I was puzzled by not hearing any shots from Low, and as I put pressure on the left rudder bar to turn off, I glanced back at him. Dave had "gone west." He was lying back, with his head and chest riddled, kept in his seat by the wind pressure. At the same moment I felt a fierce pain in my right foot as it was yanked off the bar.

As I had already begun to press on the left rudder bar in order to turn to get clear of the Gotha, when my right foot was jerked off the right rudder bar my left foot pressed spasmodically on the left, and with my ailerons banked over for the turn I naturally went into a spin.

I was suffering intense pain, but my head was fairly clear. I saw several of the Huns start after me and return to their formation, evidently convinced that I was done for. Keeping my head as best I could, I throttled down the engine, and when I was well below 10,000 feet I straightened out of the spin and took my bearings.

I saw a mass of woods and, close by, an aërodrome. I didn't know it at the time, for I was rapidly becoming what we used to call in the States "woozy," but the woods were Heinault Forest, and the aërodrome was Heinault Farm, one of the landing stations in the air-defense system.

I landed with a little bump as I began to get faint. My foot was in a pool of blood, and I felt sure my whole leg had been shot away. The last thing I saw was another machine close by with a crowd standing around it.

"What machine is that?" I muttered to the men who started to lift me out of the seat. But I never heard their answer.

I didn't know anything after that until I was in the ambulance on my way to the King George Hospital. Afterward they told me the machine I had asked about was the Gotha I had brought down. All three men of her crew were fatally wounded, and the machine was a wreck.

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FARM AND FIRESIDE

The National Farm Magazine

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Our Sea Fighters—By K. L. Smith

equal suffrage

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Secretary

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THE CASH-IN CLUB
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We had to do one of two things—lower the standard, or raise the price.

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Albert E. Winger, *Treasurer*
L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Harry M. Ziegler, *Managing Editor*
B. F. W. Thorpe, H. H. Haynes, Helen L. Crawford, *Associate Editors*
Alden Peirson, *Art Editor*

Editorial Offices, Springfield, Ohio. Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at Post Office at Springfield, Ohio, as second-class matter, under Act of March 3, 1879.

By subscription, 25 cents a year; three years, 60 cents; or five years, $1.00. Single copies, 5 cents.

Volume 42 AUGUST, 1918 Number 8

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Our Sea Fighters

How and where the hundreds of thousands of Jackies receive training for their part in saving the civilization and freedom of the world

By K. L. Smith

IF YOU were to step into one of the navy recruiting stations you would see a constant stream of men going and coming, enlisted men and civilians. On the walls are posters executed for the navy by such well-known artists and cartoonists as Kenyon Cox, Charles Dana Gibson, Reuterdahl, Bancroft, Morgan, Howard Chandler Christy, Charleton, and others.

Seated at tables are men engaged in typewriting, taking notes, greeting those who make application to enlist, and passing them on to the proper authorities. One of these is the surgeon who examines the recruits to see if they are up to the standard navy requirements.

If you are privileged to enter the private offices beyond, you see yeomen keeping books, typewriting, and doing clerical work. A little beyond you come into the presence of the head officer, the lieutenant-commander, who swears in the new recruits. You may be fortunate enough to see a recruit come in.

Usually he is a young man and serious-looking. He carries the application to which he must swear and affix his signature after taking the oath of allegiance. He stands before the commander, raises his right hand, and takes the oath. It is all over in a moment, and in that moment the young man has pledged himself to give his life to his country. It is so matter-of-fact, so short, that the looker-on hardly realizes what a solemn occasion it is until it is over. Then the young man leaves the inner office and shortly after he is told to which training station he is going.

There are six of these naval training stations which the United States Government has established. They are at Norfolk, Virginia; San Francisco, California; Newport, Rhode Island; Pelham Bay, New York; Philadelphia, Pennsylvania; and Great Lakes, Illinois, which is situated about thirty miles north of Chicago, on Lake Michigan. Every recruit who enlists is transferred to one of these for training, and later he is put on a sea-going vessel.

Primarily these schools are for young men from seventeen to twenty-five who are unskilled. Older men who enter with some knowledge of a trade may be sent to one of the numerous trade schools to gain experience. A course of academic instruction is conducted throughout the naval service, so that a recruit can take up studies he lacks and continue the same studies on shipboard. This scheme of training must of necessity be modified at present, when it is absolutely essential to get men equipped for war as soon as possible, and for this more intensive training is necessary.

The regular course in times of peace at the six training stations is similar in scope, but the climatic differences in the location of the schools make it possible for men at Norfolk to live in bungalows, whereas at Newport, Great Lakes, and San Francisco the quarters are large, airy barracks.

The Great Lakes Station is noted for turning out fine gun pointers. Ordinarily it has about 2,000 alert, ambitious young men who are going through military training, but at the present time about 25,000 are stationed there. As the station faces on Lake Michigan, where the water is as deep as that of the ocean, the spot has been well chosen for a central naval training station. Here, as in the other stations, the corps consists of commissioned, warrant, and petty officers—and they work. There is no doubt of that, especially just now when the ordinary four months course is condensed to about a week at the Great Lakes. After this the boy goes to Norfolk or on a training ship.

Boat drill is a part of the training of every Jacky

At the recruit barracks the raw and newly enlisted youth is taught how to attend to his body, wash his clothes, and even to sew so that he can mend and affix buttons. His teeth are looked after by a dentist, he makes the acquaintance of either a Protestant or Catholic clergyman, as he prefers, and he studies the three R's much as if he were in a grade school.

Then he passes to the main barracks, but with him always lingers the memory of his green days in the recruit camp. It is not an altogether unpleasant remembrance, for he has had wholesome exercise on the athletic field and entertainments such as moving pictures, as well as his schooling. Just now everything is being done at white heat, but the following is the ordinary daily routine at Norfolk as given by navy bulletins:

The bugler sounds reveille at 5 A.M., when all must turn out and be ready for muster at 5:30. From 5:30 to 7 A.M. the recruit is engaged in cleaning himself, his clothes, and the camp. Breakfast hour is over at 8, and from then until 3:15 in the afternoon the time is divided into periods for drills, studies, and instruction. Extra periods of drill are held after 3:15 for boys who cannot swim, and for those who are deficient or are required to perform extra duty. Otherwise the time until 6 P.M. is devoted to athletics and amusements.

Dinner is served at 12, and supper at 6. Between 7 and 8 P.M. there is a school for those who are delinquent in their studies, and once a week singing school is held. Recruits are required to be in their hammocks at 9 P.M., except when there is a smoker or special entertainment at the station, or the men are on leave overnight.

On Sunday the order of the day is changed, for in the morning captain's and bag inspections are held, church for those that desire, and after 1 P.M. liberty is granted.

The routine is varied at times as occasion makes necessary the shortening of instruction periods. It is probable the training has never been as intensive as at present.

Sometimes the recruits show special aptitude for some one part of the navy service, and many apprenticed seamen have become experts. At the Great Lakes Station there is a powerful radio plant, as well as an aviation school. From the Great Lakes radio school the students are sent to Harvard to complete their course. Others are afforded opportunity to study marine engineering or, when training is not so intensive as now, to study music and join the navy band. Training is also given for carpenters, coppersmiths, yeomen (clerks), and just at present special attention is being paid to aëronautic mechanics and flying. This is hazardous, but the novelty and the risk attract young men, especially those who are skilled in handling gasoline engines.

The United States Navy has the reputation of feeding its men better than any military service in the world. At any rate the food is excellent. The purchasing, preparing, cooking, and serving are done under inspection, and efforts are made to have the [CONTINUED ON PAGE 17]

Physical exercise with arms helps to harden his muscles

Will Your House be Warm—Next Winter?

If you use home-grown fuel, you can save coal with which Uncle Sam can make guns, shells, and aëroplanes, and can run warships

By W. L. Nelson

A part of the 400 men who cut and piled 150 cords of wood in one afternoon

ON OUR home farm the woodpile is on a direct path between the house and the barn. Father planned to have it so. As a result of the location and of a well-observed custom, we have seldom, if ever, seen the big woodbox when it was not filled with wood for the kitchen stove. Years ago there were six boys on the farm, and the rule was that every time one of us journeyed from barn to house he must stop and get an armful of wood unless it was known that there was a surplus in store.

And the old plan for keeping the woodbox filled is still in force. The wood used is from the home acres just as was the case thirty or forty years ago, for with judicious cutting the timber tract continues to supply sufficient fuel. Always the rough and inferior trees or those that are dead or dying have been cut. Except where thought best to put a few acres of new land to the plow, the rule has been to spare the good timber. Such a policy represents saving rather than slaughter.

A year's supply of wood is always kept in reserve. The object of this is to allow the wood, after it has been cut and corded, to season and dry out thoroughly. This adds greatly to its fuel value, and also makes for economy in handling. In early autumn, generally just after wheat-sowing is completed, the wood, previously cut to cordwood length, is sawed to a size for kitchen range and heating stoves, also for the fireplace.

Still Uses Fireplace

NO, THE big old fireplace has never been closed up. It affords a means for using the large rough pieces, such as could not easily be split. If more wood is used its cost is offset by the saving in doctor bills, for the open fire makes for fresh air and good health. Then there is the fellowship of the open hearth, the family gathering around the fire, the value of which cannot be measured in money.

The practice at Eminence, our farm, has been to use a power saw, which with an engine can be had for about $8 a day, to cut the wood into convenient lengths. Later, splitting is done at leisure times—perhaps after a shower when fields are too wet for the cultivation of crops.

As a result of these policies, empty wagons have not been drawn to town and returned filled with coal for use on Eminence Farm. Instead, there has frequently been a surplus of wood for sale.

Now, let no one who has not provided his supply of home-grown fuel for use next winter conclude that it is too late to do so. Firewood, in one respect at least, is like a country ham; it is better when thoroughly cured, but any kind of ham in the smokehouse beats none, and beats it mighty bad. It is up to every one of us, provided we have sufficient timber on our farms, to lay in a supply of wood. This is good business—and more: it is a patriotic duty.

Why do we say that it is a patriotic duty? We say so because we must have it to help win the war. To waste coal, just as to waste grain or meat, is to cripple Uncle Sam in his fight against the Kaiser. When you burn wood you save coal to make guns and shells, to make aëroplanes, to fire warships, to fight for freedom. So says the United States Fuel Administration, which adds: "Munition plants cannot burn wood, warships cannot burn it; nor because of the transportation problem, can people living in cities. It would not help matters to try to ship wood by rail. It is too bulky and cars cannot be spared for carrying it."

The last statement makes it plain that wood must be used locally. Freight cars are needed for hauling coal and other commodities, just as coal is needed to fire the locomotives that draw the heavy loads from station to station and across the continent. Every farmer who provides his own supply of wood is helping to relieve the fuel shortage, and every town man who buys locally produced wood is assisting to solve the transportation problem.

These are abnormal times. Factories and furnaces, locomotives and ships, are demanding more coal than was ever before consumed. Few people, though, ever stop to consider how great is the nation's consumption of coal, even when times are normal. In 1900 the United States produced about 269,000,000 tons of coal, including both bituminous and anthracite. From 1900 to 1917 there was an increase of about 17,000,000 tons a year. During 1917 the estimated increase was 60,000,000 tons. It has been figured that this increase, if loaded into coal cars averaging 38 feet in length, and allowing a space of three feet between each car, would make three trains extending across the continent from New York to San Francisco, with another train from New York to Indianapolis. Yet so great was the demand for coal, as the result of war work, that at the end of the year the nation was 50,000,000 tons short. This means three trains of empty cars across the continent.

As patriotic farmers it is up to us to help fill these empty cars. By mining coal? No, not that way. One and a half cords of wood just about equals one ton of coal in fuel value. So if we have been using 10 tons of coal during a season and can substitute instead 15 cords of wood, we become one of 5,000,000 people who can wipe out the shortage. But it is not necessary for us to do all of the saving.

Saving will also come in other ways. It was to save fuel that the Daylight Saving Law, which changed the time of every clock in the country, was enacted. With the same object in view heating plants are being consolidated, large electric advertising signs eliminated, and unnecessary outdoor lighting discontinued. Better firing on the part of firemen and furnace men will prove another helpful factor. The call is for teamwork regardless of whether we live in city or country.

The large rough pieces that are hard to split can be burned in the fireplace

The wood-for-fuel campaign is nation-wide. The slogan, "Cut a cord," is a real war cry, and in every part of the country the people are awakening to its importance.

One effect of the agitation has been to revive the old-fashioned wood-chopping bee of our fathers. Community and neighborhood wood-choppings have been held throughout the country. One of the most successful was held near Columbia, Missouri. A short time before this the Missouri Wood Fuel Committee had been formed at Jefferson City, the state capital, with Lieutenant-Governor Wallace Crossley, state fuel administrator, chairman.

Meet the Fuel Shortage

OTHER members of this coal-conserving committee are: Attorney-General F. B. McAllister; A. J. Meyer, director of the Agricultural Extension Service of the University of Missouri; Prof. Frederick Dunlap of the Forestry Department of the University, and C. F. Korstian of the United States Forestry Service. These men were assisted by H. A. Collier, fuel administrator for Boone County; H. S. Jacks, secretary of the Columbia Commercial Club, and others, including members of the University of Missouri faculty.

One object of the Boone County chopping bee was to provide a supply of wood for the poor of Columbia, and to help meet the fuel shortage of the city. Another object, and it was the one in which the state and national fuel administrations were most directly interested, was to add interest to the wood-for-fuel movement. Fortunately, within two miles of Columbia was a wooded tract, and equally fortunate was it that this timber was owned by C. B. Miller, a public-spirited citizen, who had agreed to give all the wood that men donating their services would cut on the day named.

The woodcutters, numbering about 400 men and boys, included farmers, veteran woodsmen, students, merchants, professors, and men in almost every walk of life. Working in a businesslike way under direction of squad leaders, these men, with axes and saws making music, cut and piled about 150 cords (4 x 4 x 8 feet) in one afternoon. Members of the Missouri Wood Fuel Committee who were present declared that the Columbia chopping party was a complete success.

"Not only was a considerable quantity of wood fuel produced," said Mr. Korstian, who has helped start the campaign in several States, "but the people took hold of their axes and saws with an earnestness which convinces me that the whole State is 'going over the top' in this campaign. Nowhere has this plan of using wood instead of coal been more quickly and enthusiastically accepted."

This plan of burning wood instead of coal is no more impractical and no less patriotic than our substitution of corn for wheat. Large quantities of coal have been consumed [CONTINUED ON PAGE 26]

Professor Dunlap, head of the School of Forestry at the University of Missouri, helped to pile and burn the brush

Estimating the Nation's Crops

Before the wheat has headed out, and while the farmers are still cultivating corn, our Government can calculate approximately what the harvest will be

By E. B. Reid

"READY, get set, go!" shouted a stentorian voice. The sound of racing feet over the tile flooring was immediately followed by the rapid fire of telegraph instruments and by the excited shouting into telephone transmitters of a series of numbers.

No, I am not trying to tell about the start of a horse race, although it is nearly as exciting, at least for the participants. This race and what is recorded at the end of it are of vastly more importance to the United States—yes, even to the whole world—than anything ever run by horseflesh. It is the "flash," as the telegraphers would say, of the monthly or a special crop report of the Bureau of Crop Estimates, United States Department of Agriculture, at Washington, and the race is a short 20-yard sprint from the table holding copies of the crop report to the telegraph and telephone instruments.

"But I thought you said this was a crop report, not an athletic event? Why all of the racing?" I hear you ask. That is a logical question, for the first time I witnessed the event it seemed to be more like a farce than the real thing. However, after watching the performance many times I have come to the conclusion that it is exactly in keeping with the Government's determination to play absolutely fair and not to put out biased information. The fact is, competition among those who send out the news of the reports by wire became so keen that in justice to all the report is released to all simultaneously, and the man with the longest or the fastest moving legs can obtain only a few seconds' advantage over his competitors.

The little race across the corridor of the dignified and sedate old agricultural building is only the beginning of the flash which carries the report to every person in the United States who is sufficiently interested to read it. And there are untold numbers who read it and, if necessary, revise their judgment by it. Out in Kansas the farmer philosophically picks a straw and soliloquizes upon the report, the weather, and the market. On the grain exchanges, when the effect of the report has not been properly "discounted," it is received quite differently: there is a frantic shouting, raising of fists with fingers and thumbs extended to indicate their owners' bids on a rising or declining market.

The report is flashed to the Associated Press, which communicates it to all of the metropolitan journals, by which it is printed the same afternoon or the following morning. The news contained in the report appears in a remarkably short time on the bulletins of the boards of trade, stock exchanges, and on the "ticker tape." At the same time the report is released the totals for the United States and the detailed state estimates are wired to the state agents, who add the local color and mail or wire the report throughout their States.

The receipt of the cotton report, in particular, on the exchanges frequently has caused exciting scenes, bears or bulls selling or buying according to the condition or yield of the crop as indicated in the report. The delay of only a few seconds in transmitting the reports might cause serious trouble.

A national crop report as issued by the Bureau of Crop Estimates to a considerable extent is a composite of thousands and thousands of individual estimates of the local situation.

In order to see just how carefully the figures are gathered and considered, let us look a little more closely into the organization, for there are other cogs in this machine quite as important as the army of local reporters.

The central office of the Bureau, of course, is located at Washington. Here are housed about 135 employees, most of them statistical clerks, computers, and trained statisticians experienced in handling and interpreting agricultural facts. This force is augmented by 42 salaried state field agents each of whom is required to travel over his State systematically during the crop season, and personally to inspect crops, interview farmers, representatives of commercial houses, mills, elevators, buying and selling agencies, and state and local authorities. He enlists the voluntary services of 250 to 1,500 selected crop correspondents in his State, who report to him monthly. At the close of the month he forwards to the Washington office a detailed estimate with full explanations, showing the causes which have made it necessary to change the estimate of the previous month.

Two other classes of voluntary reporters send reports directly to the Bureau at Washington: 2,800 county and 30,220 township reporters. The former return each month replies to printed schedules, the information for which being obtained for the county by observation, inquiry, and upon written and telephonic reports. The service of the township reporters is of a similar character but covers the more restricted area.

These sources of information are augmented by the replies from farmers on special lists classified according to the particular crops which they grow, such as potatoes, apples, cotton, beans, cranberries, peanuts, broom corn, other special crops, and live stock. Also lists of buyers, dealers, mills, and elevators, producers' and shipping associations, and other agencies engaged in handling, transporting, storing, and distributing crops are utilized.

The final steps in making up the crop report are shrouded in secrecy of the deepest order. In addition to the heavy penalty prescribed by law, every possible safeguard is used to prevent any individual or group of individuals in the Bureau from having access to the state totals for any of the so-called speculative crops—cotton, corn, wheat, oats, rye, and barley—until the Crop Reporting Board meets. This Board is composed of the chief of the Bureau, assistant chief, chief of the Division of Crop Reports, two statistical scientists, and one or more of the field agents called in from different States each month. When the returns from the voluntary crop reporters are all in, they are sorted by States and districts and partial totals are tabulated on sheets which are identified by numbers only, there being nothing on the sheets to indicate either the State or the crop, so that the work of adding up and averaging the partial totals is purely mechanical. The tabulation sheets are cut up into sections which are distributed to different groups of computers, and the results are not assembled by States and crops until after the Bureau is put under lock and key on crop-reporting day. The reports of the state field agents are forwarded in specially marked envelopes addressed to the Secretary of Agriculture. These are separated from other mail in the Washington post-office and delivered by special messenger to the private secretary to the Secretary, who signs a receipt for each and places them, with seals unbroken, in a locked receptacle in the office of the Secretary. On the morning of crop-reporting day the state reports, still unopened, are turned over to the chief of the Bureau, who is also chairman of the Crop Reporting Board.

At this stage of the making of the report it would be about as dangerous for anyone to try to get into the Bureau as to show his head over the top of a trench located opposite the American sector in France. Guards are stationed outside of the locked doors leading into the Bureau, and they have strict orders to prevent anyone from entering or leaving, except the Secretary or Acting Secretary, who cannot leave until the report is issued. The Crop Reporting Board and a force of expert computers are locked in adjoining rooms within the Bureau so that there is no communication between them and other divisions of the Bureau. All telephone and telegraph wires are disconnected on the previous day, the switchboards in the basement are locked, and the key is retained by the chairman of the Board, who is locked in while the Board is in session. All the data available with respect to each crop under consideration are assembled, totals and averages by States and crops are passed upon by the Crop Reporting Board, and a summary of the report is set up on a duplicating machine from which copies are made for issuance to the press associations at the hour and minute fixed by the Secretary.

The Crop Reporting Board necessarily must be composed of men of mature judgment and trained in the idiosyncracies of crop statistics. Crop-reporting is not a mere guessing match in which my guess may be as good as yours because "nobody really knows." In fact, unless all of a rather long and varying list of essentials are considered in crop-reporting, it's about the easiest thing in the world to make a serious mistake.

It was not very long ago that many farmers and some business men were inclined to question the value of crop reports. Like most calamity howlers they stated the information always got to the dealers first, who promptly worked both ends of the market against the middle, using the information either to gouge the consumer or fleece the producer. Their attitude, however, reminds me of a certain farmer living far up in the hills of South Carolina who had little respect for the medical profession. To visit him I climbed up a precipitous path and, opening the yard gate, I beheld an extraordinarily large black-and-white billy goat eyeing me malignantly and jumping up and down in his tracks as if testing the ground and his muscles preparatory to butting me back down the valley. Just then a voice called, "Stop it, doctor! Stop it, doctor!" The goat controlled his St. Vitus reflexes, and I entered the dooryard to meet the farmer, who had enjoyed my timidity. "Why do you call that goat 'doctor'?" I inquired with curiosity. The reply came quickly and with some asperity: "He has whiskers, horns, and is equally dangerous to human life."

If there were no official reports, market speculators would obtain more or less information and exaggerate it for their own ends. As a matter of fact, many intelligent agencies actually do gather information in advance of the Department's announcements, and sometimes they come fairly close to the Department's reports. The effect is to prevent very wide fluctuations as a rule.

The Bureau of Markets' rapidly developing system of reports on the amount of perishable food products, such as apples, potatoes, meats, butter, and eggs held in cold-storage warehouses is becoming more valuable for checking estimates on production. This new work is equally as important as the estimating of crop yields, since it enables the producer, dealer, and consumer to know the size of stocks in storage at all times of the year and to shape their transactions accordingly.

Since the United States was forced into the war and its responsibilities in food production increased many fold along with its other activities, hardly a day has passed in which the newspapers or magazines have not informed the public of some new phase of the food supply. "The demand for accurate agricultural statistical information," according to Leon M. Estabrook, chief of the Bureau of Crop Estimates, "is without precedent, and the best part of it all is, we have been able to meet the requests in all but a very few instances. This Bureau has been compiling and disseminating statistics for more than half a century and the organization which it has built up is now fully meeting the tests to which it is being put. It is interesting to know that the farmers' intention to plant in 1917 came within three [CONTINUED ON PAGE 11]

These men are all set for the short sprint from the table holding copies of the crop report to the telegraph and telephone instruments

Smokes for the Trenches

Although tobacco has won for itself a high place at the front and the training camps, it is raised as a pet at home and won't do its best unless pampered

By Frank Ziegler

As ventilation plays a big part in curing, the barns have many windows

It won't pay its keep unless it has rich soil and much moisture

NO ONE but a soldier who has gone over the top really knows the soothed nerves, genuine comfort, and keen satisfaction one can get from tobacco. It's the last thing he wants before the attack and one of the first things he wants afterward. Yet this plant which has won for itself such a high place in the front-line trenches and the training camps is raised as a pet at home. It must have a cloth or lattice roof to break the force of the sun, and steam-sterilized soil. It goes farther: it demands rich soil and much moisture or it won't pay its keep.

Even all this attention doesn't satisfy its desires. It has to be grown in small seed beds until four inches high before it will live and prosper when transplanted. And it simply has to be transplanted before it will even consider the idea of doing its bit.

A grower can't decide to raise tobacco on the spur of the moment in the merry springtime, and get away to a good start. Far from it. He has to begin the fall previous by spading and raking the beds, and working stable manure and cottonseed meal into the soil.

When the weather gets warm in the spring, glass covers are placed over the seed beds to help warm the ground to drive the frost out. Then the beds are spaded and raked, and a small amount of commercial fertilizer is applied and raked in.

The seed beds are sterilized by placing over them a large galvanized-iron pan, 12 feet long, 5 feet wide, and 7 inches deep. Care is always taken to have the edges of the pan well into the ground so no steam can escape. From 70 to 100 pounds of steam forced into the pan heats the soil two inches deep. The steaming process continues for thirty minutes. As soon as the pan is removed, burlap is placed over the steamed section so the ground will retain the heat as long as possible.

Steam sterilizing kills a great many weed seeds, root rot, and other diseases and insects that hinder the growth of young plants, and enables the seeds to germinate quicker, and the plants to grow faster.

Here is what a tobacco grower has to do: After the crop is harvested, the stalks are chopped down, the ground is disked, harrowed, dragged with brush, and a cover crop sown. Then it stands until spring, when tobacco stems are spread over the land. Just as soon as the ground has dried out enough to work up properly it is plowed, disked, and harrowed. Plowing early in the spring gives the dead grass and tobacco stems time to rot before the plants are set. The fields are disked every few days to kill the weeds.

Ground limestone and the fertilizers, which consist of cottonseed meal and one or two special commercial fertilizers, are then applied. In some cases a complete tobacco fertilizer is used alone. Barnyard manure is also used very extensively in the fall. Each application of fertilizer is disked in. After the last application of fertilizer is properly disked in, the land is left to stand a few days. Then it is again disked, harrowed, and dragged with brush, after which it is ready for the crop.

Most of the wrapper tobacco in the United States is grown under a half-shade. The most popular are the lattice shade and the cloth shade. The lattice shade is used mostly in the South because it doesn't have to be taken down for the winter. The cloth shade is used in the North, as it is cheaper to renew every year.

The lattice shade is made of small strips of wood three-fourths inch wide, and nailed one-half inch apart. This lattice is nailed on posts that are eight feet above the ground, and set every 25 or 20 feet all over the field. A solid board fence is built on all sides of the field, from the lattice to the ground.

Shade Resembles a Large Tent

THE framework of the cloth shade is left standing from one year to the next. The cloth is the only part of the shade that is renewed every year. The framework is made by setting 12-foot posts four feet in the ground.

These posts are set 24 feet apart each way in the fields. No. 6 wire is stretched tight and stapled on top of these posts, running one way. The cloth is especially made for tobacco shading. It is just wide enough to stretch tight from one wire to another, and lets just enough sun through it to be called a half-shade. There are 12 threads to an inch of cloth. Cloth is also fastened to the outside wire all around the field and dropped to the ground so as to have cloth on all sides as well as on the top. This shade resembles a large tent.

The shade is erected a few weeks after the spring plowing is started. It is examined every few days and all holes kept patched. Too much sun or wind will blow the tobacco down when the shade is torn, because tobacco is very tender and the stalks are easily broken.

Before sowing the tobacco seed, ground apple tree punk and sifted ashes are mixed with it. A tablespoonful of seed is enough to plant 175 to 225 square feet of seed bed. The mixture of seed, punk, and ashes is sowed broadcast over the entire area.

The seed beds are watered every few days after planting until the plants are an inch high. Then water is used more sparingly. The young plants are protected from the cold, heavy rains, or hail by glass covers.

When a plant is forty-five to sixty-five days old it is generally four inches high—big enough to be transplanted. Then the plants are sprinkled until the ground is real wet. This enables the grower to pull the plants without danger of injuring them. The pulled plants are placed in a shallow basket, with the roots down, and taken to the field. The tobacco that is not grown under a shade has heavy and tough stalks and thick leaves.

The transplanting is started when the shade is finished. Machines doing this work consist of a barrel set on a two-wheel truck with a wheel at the front to smooth the ground and a plow at the rear of the truck to open a furrow where the plants are set. Other shovels on the machine throw soil up to the plants after they are planted. A pipe governed by an automatic gear is fastened to the bottom of the barrel. This releases one cup of water where a plant is dropped. One machine, drawn by a team and operated by three men, will set from 3½ to 4 acres a day.

The tobacco is set in rows three feet apart, with the plants from 10 to 12 inches apart in the rows. The plants between the posts are all set by hand. Three or four days after the transplanting, fresh plants are set where plants have died or are missing.

A mixture of Paris green and wheat middlings is sprinkled on the plants to protect them from cutworms. The mixture is dampened so it will stick to the leaves. It is applied to the plants on a dry day because on a rainy day the poison would be washed off before it has served its purpose.

Five or six days after the plants have been set out, the rows are hoed and the soil around the plants tilled. A one-horse cultivator is used between the rows. The plants are cultivated once a week until they are so large that there is danger of injuring the leaves. The last cultivation is given with a special horse hoe.

The buds are removed from the plants just before the flower opens. As some of the buds appear before others, the field has to be gone over several times before all the plants in the field are topped. Just as soon as the first priming or [CONTINUED ON PAGE 11]

Raised as a pet, tobacco demands a lattice or cloth roof to break the sunlight

Dulcie Decrees

The sympathy of a cigar girl for a lovelorn youth leads her into perilous ways, but she cleverly conceives a plan of escape

By Elva Sawyer Cureton

PART I

A BLOND youth with fresh, girlish complexion and dissatisfied eyes was registering at the desk. Beside him a bellboy hovered with two shiny new suitcases. Behind the desk the dark, sharp-featured girl might have been a crayon portrait of his grandmother for all the notice the youth took of her presence.

Throwing down the pen, he took the key she handed him, and for an instant their glances crossed. He turned and followed the boy across the lobby to the foot of the stairs, paused, patted his pockets experimentally, and, with a low word to the boy, wheeled and walked briskly back to the desk. A moment later he was leaning on one elbow in a confidential attitude, smoking his twenty-five-cent cigar and talking to the girl.

Behind a dusty potted palm in a far corner of the lobby the manager rubbed his fat hands together and spat complacently at the green tub. It had not been really necessary to watch. He could have told with his eyes shut every move in the little comedy. It was always the same. They came, they hardly saw the plain, sharp-featured automaton at the desk; then, just as they were leaving, the look—sometimes a faintly derisive smile—the abrupt departure, the inevitable return.

The girl before her, one of the obvious charmers usually chosen for such positions, had deserted without notice, and Dulcie had miraculously appeared from nowhere and asked for work before he had had time to look for anyone. He had given her an indifferent scrutiny and told her there was no opening.

"Except at the desk," she had supplied.

"Oh, that!" he had returned, amused at her innocence. "You're not just the type—" he trailed off suggestively.

"I'll take it till you get just the right party," she had decided, beginning to remove her gloves. "That'll give you time to look about and get suited."

And so it had been settled. Just when it had begun to dawn on him that his search was ended, he wasn't quite sure; but when, at the end of the third day, she called for more of the most expensive cigars in stock; and mentioned that Egyptian Harems were also low, he opened his eyes. And it was then he really began to notice the boomerang quality of that quick flash from a pair of still, very still dark eyes.

So Mr. Strauss rubbed his hands complacently as Norval J. Whitlaw, with a smile and a nod, leisurely followed the patient bellboy up the stairs to No. 13.

"Number thirteen! Just my luck!" muttered the young man disgustedly, as he tossed his hat and light overcoat on a chair and began unpacking his grip. He fidgeted about the room for a time, his face about as cheerful as a humorist at home. Then a ray of sunlight seemed to pierce the gloom, for the drooping lines of his indeterminate mouth curved suddenly upward into a reminiscent smile. Perhaps he was thinking of something the dark little thing at the desk had said.

Three days later Mr. Strauss leaned over the desk and spoke persuasively.

"Don't you think you're letting No. 13 speed up too fast? It ain't good business to let him pass the others too far."

"Don't I hold down my job O. K.?" demanded Dulcie haughtily.

"Yes—yes, certainly. I ain't making a kick, see? I just thought—"

"You just thought I belonged to you from the shoe laces up for a measly little fifteen a week!"

"It's more than I ever paid before," he protested. "You forget board and lodging thrown in."

"And fifteen hours a day!" Her tone was caustic.

"But you get two hours off, and you take it whenever you please," he whined. No one else had ever had the nerve to demand such a thing, but as the Seabeach Inn had been trying to sneak away the best asset of the Breakers he had given in to the femininely unreasonable demand.

"And now you want to dictate what I am to do with those two hours! Can't a girl have a minute to herself without you yelping and barking around like a coyote, trying to queer her good times?"

"It's all right, it's all right," soothed the manager hastily, beginning to back away. "I just thought—"

"Well, keep your maiden meditations to yourself. I take dictation in business hours *on* business subjects. Get me?"

"Yes," returned the fat little man meekly.

"Then *that's* all right!" She flirted the heavy lashes up, and the faintly derisive smile puckered the corners of her mouth.

Mr. Strauss laughed as if a load had been lifted off his chest. He rubbed his hands and nodded several times.

A moment later he was leaning on one elbow in a confidential attitude, smoking his twenty-five-cent cigar and talking to the girl

"*That's* all right," he repeated, as if in some mysterious way he had wrested victory out of defeat.

IN a little cove far from the boardwalk, but still in sight of the shifting splotches of color in front of the Casino, sat the independent Dulcie, the young man of No. 13 sprawled at her feet. Little sparkling lines of blue-green breakers stood at attention, broke, attacked the impregnable sands, and retreated with fascinating persistency. Dulcie watched meditatively, the tail of her eye taking in the supple length of limb and clean-cut profile of the youth.

"So you noticed I had something on my mind," he was saying with melancholy satisfaction.

"Yes," said Dulcie softly. "You don't knuckle to it, a person can see that, but deep down it's always on the job, Mr. Whitlaw."

"Cut the Mister stuff, Dulcie. It get's on my nerves!"

"Oh, if you feel that way, Norry, of course—"

He threw a handful of sand toward the water.

"I feel like—I feel—I don't know what I feel like. My father treats me like a kid, and Mother hasn't the backbone to oppose him, so there you are!"

"Why do they object?"

He threw up a startled head.

"How did you know about it?"

"I don't. But the girl, is she all—right?" The last words of Dulcie's question were hesitant and apologetic.

"I should say she was!" he replied indignantly. "She's the sweetest ever, a little peach!"

"Then what is it?"

"She's poor for one thing; and her ancestors didn't claw into the ark, but swam about and had such a hard time looking out for themselves they didn't have time to have their pictures taken and get a write-up in the Weekly Archives."

Dulcie laughed appreciatively.

"And so Father threatens to cut you off without a shilling—"

"Not that exactly, but he acted so nasty Dora's parents got up on their ears, and now there's the devil to pay."

"The thing for you to do is just what you are doing, boy! Keep a stiff upper lip and let them do the worrying. You'll see."

"And meantime I suppose Dora expects me to act like a monk on sick leave—if they get that." His boyish disgust and palpable boredom were too much for Dulcie's gravity. She burst into a peal of laughter.

"I don't see—" he began, turning a flushed sulky face to her sparkling one.

"You a monk!" she sputtered.

A sheepish grin overspread his face.

"You!" Her derisive tone made of him a gay Lothario trying to pose as a stodgy yokel. His eyes began to twinkle, his chest to expand.

"It's the limit," he complacently agreed.

"It's a crime!" she affirmed very positively. "What's the use?"

"Dora and her mother are here now. I may run into them any minute."

"Has *she* retired to a convent?"

"I should say not!" Jealous anger made his tone vitriolic.

"Then show her that if she hasn't the pep to defy authority you've got no apron strings attached to you."

He threw up his head, and the weak mouth snapped together stubbornly.

"We'll go to the hop to-night, you and me," he affirmed resolutely.

"I'm only supposed to get two hours off, but—I'll do it," smiled Dulcie, who had intended to go all along.

A WEEK later Dulcie and her young Lothario were again ensconced in the little cove beyond the bathing beach. But there was a change in the atmosphere. The waves no longer charged; they broke sullenly, spitefully. Dulcie no longer challenged, invited, spurred to greater daring the likable youth with the weak mouth. She appeared vaguely on the defensive, standing poised as if for flight. There was something akin to fear at the back of the still dark eyes that watched the youth covertly, uneasily, as he poked angrily at the sand with a broken bit of driftwood. At length he broke out as if resuming an old argument.

"Why won't you come? Everyone does it. The river'll be as smooth as glass. And moonlight."

"But I've been taking so much time off lately," objected Dulcie. Here I am—"

"Going the minute I get here. You're always running away lately. What's the use of that?"

His argument had some cogency. She realized that she could not go on dodging forever. The boy was getting sullen, ugly. She must find some better way.

"All right," she agreed suddenly. "At nine."

He sprang up delighted.

"Dulcie," he cried exultantly, and moved toward her, but she eluded him and ran off saying, "Let me go back alone. I must hurry, Norry."

That afternoon Dulcie did some hard thinking. There was a hurt look in her eyes, a bewildered impatience at the inscrutable working of Providence.

"He's a nice boy," she [CONTINUED ON PAGE 26]

FARM AND FIRESIDE

The National Farm Magazine

Founded 1877

Published Monthly by

The Crowell Publishing Company,

Springfield, Ohio

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By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

AUGUST 1918

If Your Copy is Late

YOUR copy of the magazine may be a little late these days because the railroads are congested with troop trains and shipments of war supplies. Be patient, therefore; you will get your magazine after a few days' delay—at the very most.

The Last Million

ALTHOUGH inferior numbers, because of their strategy, tactics, and morale, have won many battles, it must be recognized that the determining factor of campaigns and wars is superior numbers. When a battle has reached a critical stage, the side that can put in the most fresh men usually can be sure of a decision.

The same thing applies to the present world struggle. This war will be won by the reserve strength of the Allies thrown in at the crucial moment. That time may come this fall, and again it may not come until next spring; but it will come. We are the reserve strength of the Allies. The last million men required to tip the balance in favor of the Allies will win the war. And those men must be Americans.

All during the war the advantage to the Germans has come from their superior numbers. Just as soon as the Allies can outman the Germans, just that soon will the Germans be compelled to retreat toward the Rhine.

America is the allied reserve. America is the last million needed to crush the Huns and win the war.

Honest with Ourselves

AN AUTOMOBILE manufacturer who sent out a large number of letters to representative persons in various parts of the country received this note in response to one of his inquiries: "I do not own a car, and don't expect to for a while. All I have to spare goes to the Government."

If the person who sent the foregoing reply is denying himself an automobile which he could otherwise afford and is investing the price of a car in Liberty bonds or war savings stamps, he is to be commended. But if he is simply investing a part of the price of the car in bonds and putting the rest away in his savings account, or tying it up in some venture that will add to his profits and income, he is not doing his best.

Money is a medium of exchange; business depends upon its interchange freely. If we tie our money up so that it does not move back and forth, if we bury it in the ground or retire it from circulation, we unsettle business conditions and make the war that much harder to win. We must cut out the extravagances and minimize the necessities, but we must not become niggardly nor save simply to the end that when the boys come back from the war we may have two or three times the personal wealth that we had when they marched away.

Let us be honest with ourselves and with the Government. Are we paying out one hundred cents on the dollar on what we owe the Government, or are we paying out about thirty or forty cents and putting sixty or seventy away so that we may be that much richer, that much better equipped with ready cash, when the war is at an end?

The war is teaching us thrift, and yet business must be carried on, or we shall lose the battle. Shall we not see to it that it teaches us honesty of purpose and integrity of personal conduct as well? Let the automobile go another year, if absolutely necessary, but invest its equivalent with Uncle Sam to the last cent, and do not let the job slip by half-heartedly done.

A Time to Smile

A PLOW is one of the finest tools on the farm, but it must be struck deep into the earth or no golden harvest will ever be gathered from its furrows. A good heart, breaking forth in a cheerful smile, is the surest way to lighten the dull furrows of life and give joy and peace and loving-kindness a chance to do their best.

On some farms, at the present time, life has taken on a pretty gray aspect. There is just one way to help these men and women to get back the old happiness and to do better work and be better folk than they used to be; and that is for all of us to smile and say a kindly word every time we can. It is a fact when we smile we boost. We boost sorrow and trouble out of the back door and we boost strength of purpose and a big determination to win out into their old place by the fireside.

This is no time for any man to flag in his efforts to be the best farmer he can. A hungry world stands at the door asking that we make every acre the most productive possible; gaunt and peeked faces look in at the window and beg of the farmers of America not to turn them away with empty hands.

So it is a time to be brave and cheerful, to smile, to speak the helpful word, to do the kindly deed, and to get close down by the side of every tired man and woman and lift them over the stress and the strain until the shadows pass away and the skies are brighter than they were before the storm of yesterday came. And clear skies are surely coming. Let's all help them to come!

Threshing Dinners

WITH threshing days come threshing dinners. Now, a threshing dinner does not mean the same to everybody—not even to every farm woman. Some fret and worry over the preparation of the meal, while others apparently enter upon the work with as much pleasure as if the task were that of preparing a picnic lunch. The viewpoint, the ability to manage, and the cooking and refrigerating facilities have much to do with these differences. Then there is the item of help.

System comes first whenever any unusual task is to be looked after, and this is especially true of preparing the threshing dinner. One woman has chickens killed and dressed in advance, if chickens are to be served as a part of the meal, while another waits until the last moment.

Nor is the latter woman necessarily to blame. Probably she would have prepared much of the dinner in advance had it been practicable. Perhaps she had no ice to keep fresh meat and other highly perishable foods. With ice, half the dinner may be started or made ready the day before. Even where ice is not used regularly it will pay to have it at threshing time.

As to the dinner, it should be plain but good and served in an appetizing manner. Men who handle pitchforks or do other heavy work all day want something more substantial than "fancy fixings." This does not imply, though, that boiled cabbage, fat meat, and other heavy foods, important as they may be, are all that is required. There should be a variety. In such seasons as this, when vegetables are plentiful, threshing crews often get practically the same things day after day until their stomachs rebel. Under these circumstances it is a wise woman who provides at least a few dishes that are different.

Of course there must be as the basis of every threshing-day dinner plenty of good meat, preferably two kinds, and an abundance of bread. If one of the meats can be such as is not commonly served in the country it will be all the better. Something sweet in the way of preserves or jelly is a good addition to the meal, appealing as it will to the delicate eater or to the man who is "too tired to eat." Desserts need not be heavy, but a carefully prepared dessert is desirable.

Promptness and cleanliness are important in serving the threshing dinner. The men must not be kept waiting, nor should they, while eating, have to fight flies. If it is necessary to set the tables out of doors instead of in a screened dining-room, everything should be covered so far as possible and fly brushes should be kept going.

Home-Canning Record

AT LEAST 800,000,000 quarts of fruits and vegetables were canned in the homes of the United States in 1917. They were worth $200,000,000. The products in many cases came from ground that formerly had borne nothing. In other cases they represented a surplus that used to be thrown away or, at best, fed to the hogs.

Most of the food canned in the homes is from home gardens. It is stored in the homes and consumed there. The railways of the country, taxed to their utmost capacity by the unprecedented demands of a time of war, not only are not burdened by transporting these goods, they are also substantially relieved of a former burden because these canned goods take the place of foodstuffs that used to be shipped from canning factories to wholesalers, and from wholesalers to retailers, who sold to the farmer what he produced in the first place.

This year canning is a patriotic duty. If the United States is to do its full duty in the war, not an ounce of food must be wasted. Wherever there is a surplus over immediate home needs, it should be preserved for later use.

The aim of everyone who has a garden should be to help the United States go over the billion mark in the number of quarts of fruit and vegetables canned in the homes. To go over the top in this everyday work at home will help American soldiers to go over the top victoriously in France.

On the Upper Branches

THE choicest fruit grows on the upper branches. When we want to see the finest products of the farm we must look high up, among the limbs that are nearest to the pure air and the sunshine.

It is the man who thinks big thoughts, plans great enterprises, and carries them out who makes the real success in his chosen line. Never until a man's heart is filled with love for his work can he be truly happy and reach life's finest prizes. Working hard will not do it; investing a great deal of money will not do it; nothing but the investment of self will win. Top-branch farming is a thing of the best possible study, the deepest possible thought, the most careful planning, backed up by good workmanship.

Millions of men have gone across the stage of life and left not a single mark to show that they ever lived. Their names are forgotten. They plowed, they sowed, they gathered into barns; but where are they? What have they left to make the world any better or to prove that they were worthy the place they occupied? Not a single thing. Their lives were pale fruit, growing down out of sight, under a burden of leaves and branches.

This need not be so. The call of to-day is for the very best there is in us—not here and there a man, but all. The world need for big men on the farm is urgent. It will never be fully met until all men everywhere appreciate to the full the dignity of good farming, and put all there is in them of mind, soul, body, and heart into everything they do, from hoeing a hill of corn to directing a great farm operation.

When Nobody's Boss

THERE is an hour when the day's work is over and the supper dishes are cleared away, when nobody's boss. Dad isn't a general any more; he became a private when he left the supper table. To-morrow he may be the court of last resort, but now he is one of the boys. The youngsters down him if they can, and the dog barks at the excitement of a free-for-all.

The fatigue of the hot summer day passes. The breeze is a little cooler. Mother and the girls sit on the steps and porch, while the boys are comfortable most anywhere. If they disagreed during the day it is all forgotten now. A tolerant mood prevails. Out in the northwest a bank of blue clouds comes over the horizon, and now and then there are little lightning flashes, almost too faint and quick to be seen. The family prophet ventures an opinion about the immediate weather. Weather prophets are never disputed: they are quoted.

The children tell their troubles, and the grown and growing-ups chatter and gossip and plan. The neighbor woman was over; a brood of turkeys are missing; kings and colts, dynasties and break-pins, the ends of the earth are brought together in those after-supper talks.

"I'm going to bed," announces the head of the house. A growing conviction is crystallized. The boys give their last attention to the horses for the night. In ten minutes there isn't a soul in sight or awake.

Real Courage

By John Coleman

FOR twenty years Frederick Benz had preached the gospel in a Midwestern State, finding his reward in service rather than money.

Then, one day about nine years ago, his health broke down, and the doctors gave him his choice between a farm or a lot in the cemetery. He was past the age when men commonly make new ventures; he had no money, and there was a large family dependent upon him.

A superficial inventory of his possessions would have shown a preacher's household goods and library, seven sons, the oldest still in his teens, and debts amounting to $1,600.

It looked hopeless, but Mr. Benz took another and different inventory. He put down as liabilities the chances he owed those sons, and as assets his boyhood experience on a small intensively cultivated tract of land near Ulm, Germany, an unsullied reputation, and an undaunted heart.

Upon that inventory he borrowed $5,000 and moved to the Yakima Valley in Washington, where he contracted for the purchase of 80 acres of land at $200 an acre, and started to raise potatoes.

Sick and in debt at an age when most men are made or broken, he didn't quit; and to-day he has both health and a fortune

In five years he paid back the borrowed money and paid for his 80 acres. He has since bought and paid for 200 more acres.

Potatoes did it. He cultivated the potato with judgment and knowledge, and helped it to grow big. Two years ago Mr. Benz's crop averaged 20 tons to the acre, of which one third were large enough to fit the "great big baked potato" slogan of a certain railroad; and for that third he got $49.50 a ton. Last year the price was not so good, only about $35 a ton, but he raised more than 1,000 tons.

In less than ten years this man, whose training had been all in self-sacrifice and who knew nothing about making money, has made over $100,000. They call him the "Potato King of the Yakima Valley."

Several of his sons have been graduated from the state university, and all of them have been their father's faithful assistants. But, what matters most right now, two of them are already in khaki, and by the time this is printed two more probably will be training to fight for the suppression of that very Prussian militarism which forty years ago drove their father to America to become a free man.

Growing Alfalfa

By M. N. Harrison

MANY people have tried to force alfalfa to grow by heavy manuring when what it really needed was lime. The result was a worse crowding by weeds. It is a much better plan to apply a heavy coat of manure and plow it under the preceding year, then plant a crop of corn, and keep the crop absolutely clean of weeds and grass.

Although it is good practice to subdue the weeds by mowing off the fields two or three times a season, there is danger in mowing the young alfalfa at the wrong time, which might tend to weaken it. Alfalfa ought not to be cut until the little shoots appear at the base of the stems. These shoots appear as buds which develop into new stems. Alfalfa is often destroyed the first year by mowing before these shoots appear.

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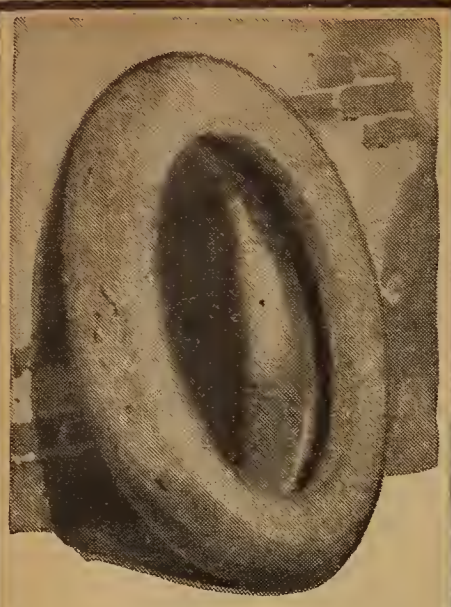

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GOODYEAR AKRON

TIRE SAVERS

The Mustard Jar

"Hang sorrow—care will kill a cat, and therefore let's be merry"

Tough Luck!

It was a balmy afternoon in spring, and the strongest of the patients at the naval hospital were out on the broad veranda. Visitors were moving here and there, among them an inquisitive old lady who seemed never to tire of asking questions.

"I suppose you have seen some hard times, sailor?" she addressed a great strapping fellow who was huddled in a steamer chair. He looked up at her and gravely replied:

"Lord, ma'am, I should say I had! Why, me and six pals were once on the crest of a wave for fifteen hours with only one small plug of tobacco to chew between us!"

Sauce for the Gander

"Wouldn't you like to have some postal cards?" asked the postal clerk of the man who had just bought a stamp.

"I believe not," said the man.

"Perhaps you'd like to send a registered letter to someone?"

"No."

"How about our stamped envelopes? They are very fine."

"No."

"Then do you need a money order this morning?"

"No—"

"How about opening an account in the postal savings bank?"

But the barber never stayed to answer. He was on his way back to advocate shampoos, singes, tonics, and massages.

Tommy Atkins' Hardships

"They put me in barracks," wrote a young soldier to his parents. "They took away my clothes and put me in khaki. They gave me a gun and a blanket, a short-handled shovel and a pick, and enough tin dishes to stock a kitchen. They took away my name, and made me No. 575. They took me to a church where I'd never been before, and they made me listen to a sermon for forty minutes. Then the parson said: 'No. 575, Art thou weary, art thou languid?' and I got seven days in the guardhouse because I said I certainly was."

Some Slide

A soldier whose head and face were heavily swathed in bandages, and who obviously had had a bad time of it, was being feelingly sympathized with by the solicitous lady.

"And were you wounded in the head, my poor fellow?"

"No, ma'am," Tommy replied. "I was wounded in the ankle, but the bandages slipped."

Common Sense

The primary class had gathered on the row of front seats for their daily lesson in number work.

"Now, Mary," began the teacher, "if there were four flies on the table and I killed one, how many flies would there be left?"

"One," said Mary, promptly. "The one you killed."

War Times

"And what is his name to be?" asked the minister, taking into his arms the baby that was to be baptized.

"John Woodrow Pershing Wilson Wood."

"Dear me!" said the minister. "A little more water, Mr. Jones, if you please."

All He Was Worth

An Easterner met an Indian who was employed as missionary among his copper-colored people in the Far West.

"What do you do for a living?" asked the Easterner.

"Umph! Me preach," was the laconic reply.

"That so? What do you get for the preaching?"

"Me get ten dollar a year."

"Well, all I can say," said the Easterner, "is that that is darn poor pay."

"Umph!" grunted the missionary. "Me darn poor preacher."

Sisterly Love

The young man had been calling on her steadily, and had made his plea several times, but she was very firm in her refusal.

"No," said she, "I can only be a sister to you."

"Very well. I had expected a different answer, but—well, good night."

"George," she faltered, as he started out into the night. "George."

He turned toward her crossly.

"What is it?"

"Aren't you going to kiss your sister good night?"

A false alarm

Honest?

POLITICIAN: Congratulate me, dear. I've won the nomination.

FRIEND WIFE (in surprise): Honest?

POLITICIAN: Now what in thunder did you want to bring up that point for?

What He Felt

The teacher had asked the children to write their autobiographies, and the essays were not very picturesque.

"Now, children," she said, "I don't want you simply to write the happenings of your life; write what you really feel inside."

Little Willie, in his second attempt, wrote: "Inside I feel a heart, liver, lungs, and stomach; and inside the stomach I feel an apple, a corn ball, a pickle, and a glass of milk."

The Limit

"I've heard that old Closefist is the town's champion tightwad," commented the stranger.

"He certainly is," answered the native. "Why, he is so stingy that he has been loafing in the drug store for the last two days, hoping that the odor of the drugs will cure his cold."

About All He Did

He was a mine sweeper, and was home on leave. Feeling a little under the weather, he called on a doctor, who gave him a very thorough examination.

"You tell me you are troubled with your throat," said the doctor.

"Aye, aye, sir," answered the sailor.

"Did you ever try gargling with salt water?"

The mine sweeper let out a groan.

"I should say so," he said. "I've been torpedoed seven times."

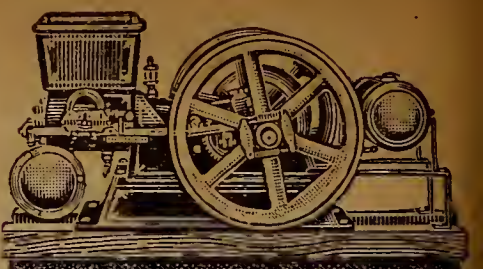
A Technicality

"Edward," said the boy's father, "didn't your grandmother just ask you not to to jump down the stairs that way?"

"No, sir. She said, 'I wouldn't jump down those stairs, Edward'; and she was perfectly right. It would look awfully silly for an old lady like her to be doing it."

O Leo Margarine!

Whether the years prove fat or lean,
This vow I here rehearse:
I take you, dearest Margarine,
For butter or for worse. —*Punch.*



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Smokes for the Trenches

[CONTINUED FROM PAGE 6]

picking is made, all the suckers are pulled off the plants.

Most varieties of tobacco require three primings besides the top leaves. The first priming consists of three or four leaves on the bottom. Each priming begins with the bottom leaves. The second priming, which starts about ten days after the first priming is finished, consists of from four to seven leaves. One week after the second priming is finished the third is ready, which consists of the remaining leaves except the small top leaves. The top leaves are left on the stalk for ten days or two weeks after the third priming, and are not as valuable as the leaves of the other primings.

As the leaves are primed they are placed in piles along the row. Each primer picks the leaves from two rows. Three men make up one crew—two primers and one trucker. The trucker follows along right behind the primers, gathers up the leaves, and places them loosely in a large basket. The leaves are handled very carefully so as not to bruise them. In curing the leaves, they are strung on a strong cord which is fastened to the ends of a lath. These laths of tobacco are then hung to cure in the barns.

These barns have either perpendicular or horizontal doors in the sides and ends. This allows ample ventilation while the tobacco is curing. During warm dry weather these doors are left open so the tobacco can get as much air as possible, which will carry off the moisture. In wet, damp weather the doors are kept closed, and if the weather continues to be damp for several days small charcoal fires are lighted in the barns.

As the tobacco is taken down it is piled on boards so none of the tobacco will touch the ground. In stripping the tobacco one lath is taken up, the leaves shoved to one end of the string by one person and taken off by another and placed on a table, where they are tied. Each bundle of leaves taken from the lath is called a "hand."

These hands are packed in a box. When one box is packed full, the paper is brought over the top and tied with heavy cord. The bundle is then taken out of the box and put in a dry place until it is taken to the packing house.

In the packing house the tobacco goes through these processes: Fermenting or sweating, sizing, sorting, and packing. The fermenting is done in wooden bins. The tobacco is well shaken and placed in layers in these bins.

Watch the Temperature

A pipe three feet long is placed in the middle of the bin into which a thermometer is placed, so that the temperature of the tobacco is known at all times. If the tobacco is getting too hot it is taken out of the bin, shaken, and replaced so that the tobacco formerly in the middle is in the ends. The tobacco is left in the bins for three or four weeks, before it is properly fermented.

The sweating-room is kept as near 80 degrees F as possible, because a lowering or raising of temperature will cause the moisture to settle on the stems. This causes them to mold, which spoils the tobacco.

From the sweating-room the tobacco is taken to the sizing-room, where all the different sizes are put together.

The leaves are sorted or graded according to color. All leaves with an even color are placed together, and are classed as first-grade wrappers. The leaves with not such an even color or torn places in them are used as cheaper wrappers or as binding leaves. Those that are torn so they can't be used for wrappers or binders are used as fillers.

After the tobacco is graded it is baled and covered with matting. Each bale is about 30 inches long, 30 inches wide, and 10 inches thick. The bales are ready for market when marked according to weight and grade.

Estimating the Nation's Crops

[CONTINUED FROM PAGE 5]

per cent of the acreages finally sown. This shows that the farmers determine early in the season what acreage they will plant, and carry out these intentions as far as the weather permits.

"During the season exaggerated reports appeared in the press to the effect that farmers were holding for exorbitant prices the remaining supply of corn. It was also stated that there was a dangerous amount of slaughtering of young female stock, that the amount of farm machinery was insufficient, and that prices were prohibitive. By means of telegraphic inquiry to state field agents the Bureau was able within twenty-four hours to prove that these rumors were unfounded.

"The Grain Corporation of the Food Administration greatly desired to know the production of wheat and rye in each county in the United States. Although our estimates heretofore had been by state totals, a telegraphic request to the state field agents brought this information within two weeks. At a later date a similar detailed estimate was made concerning the amount of wheat and rye unsold on farms.

"Another important service which this Bureau has rendered," continued Mr. Estabrook, "is the estimating of the probable surplus or deficit of seed of various kinds in the different States. This information has been particularly valuable to the Department's seed stocks committee, to the state officials and organizations, and to the state councils of defense.

"Many of the crops upon which we report are of such great importance, or the reporting on them requires such special knowledge of the intricacies of the business, that the Bureau maintains ten specialists who devote their entire time to investigating the single crop for which each is responsible. We have one each for cotton, rice, and tobacco, four for truck crops, and three for fruit crops.

"In 1917 a small force of apple specialists were placed in the field for the purpose of making a complete survey of the commercial apple crop.

"In the future other crops, such as cherries, small fruits, citrous fruits, pecans, etc., will be reported upon in a similar manner."

To overorganize a business is a sin of commission, while to underorganize is surely an omission. The Bureau of Crop Estimates, with its army of 175,000 reporters, an average of 65 for each county in the United States, is considered by those who know to be the best organized, smoothest running piece of human machinery for accruing and disseminating agricultural statistical data in existence. So well recognized is this fact that a number of foreign countries have sent representatives here to study our system and to adopt that portion which is applicable to their conditions.

Our September Number

SEVERAL of the feature articles in the next issue are:

"Balloon Strafing," by Sergeant-Pilot Dean Lamb.

"One Road to Happiness," by H. H. Haynes.

"When Our Quarters Fight," by Carlton Fisher.

"It's Always Fair Weather When Good Farmers Get Together," by Edward C. Johnson.

"Troubles of a Tractor Inventor," by George Martarian.

"Selling a Reputation for Good Butter," by Alice Mary Kimball.

The second part of "Dulcie Decrees," by Elva Sawyer Cureton.

"Moving Pictures at Mingo," by B. A. Aughinbaugh.

And a double page of pictures entitled "Boches."

Use—Barrett Everlastic Roofings

—all over the farm

The Barrett Everlastic System of Roofings makes it possible for you to have at a low price just the kind of roof you need on any steep-roofed building.

There is a style for every purpose, including artistic red or green slate-surfaced shingles, or the same roofing in rolls as well as the highest grade of "rubber" roofing.

The Everlastic System of Roofings means *real economy in roofing* for the home and farm. Read brief descriptions of four styles below.

Everlastic "Rubber" Roofing

A recognized standard among so-called "rubber" roofings. Famous for its durability. Made of the best waterproofing materials, it defies wind and weather and insures dry, comfortable buildings under all weather conditions.

Everlastic Slate-Surfaced Roofing

A high-grade roll roofing, *surfaced with genuine crushed slate* in two natural shades, red or green. Never needs painting. Colors are permanent. Handsome enough for a home, economical enough for a barn or garage. Combines real protection against fire with unusual beauty.

Everlastic Multi-Shingles

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Write for Free Booklet. For further details write nearest office for free illustrated booklet covering all of these types of roofing.

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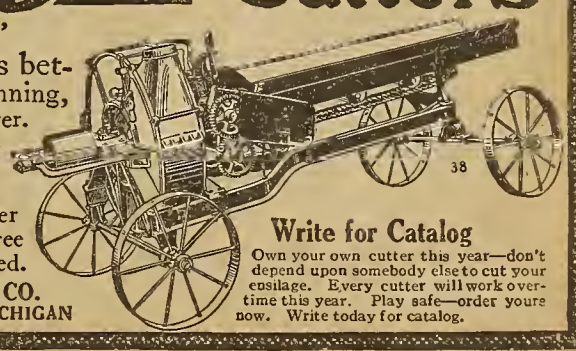

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Dept. 143 KALAMAZOO, MICHIGAN

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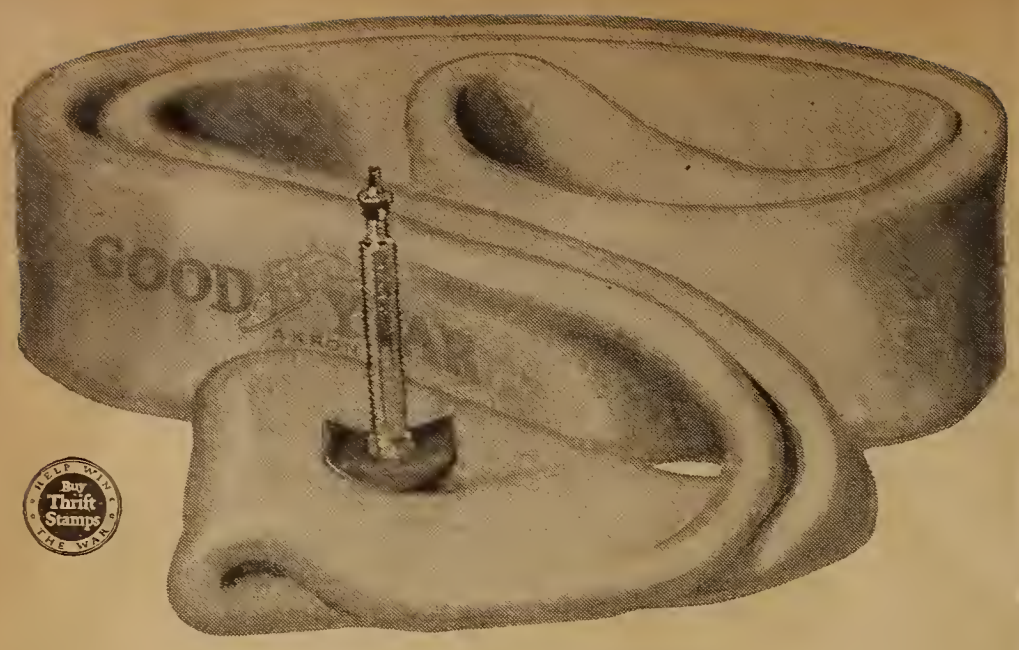

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DESPITE the enormous popularity and sale of Goodyear Tubes less than one-seventh of one per cent of them ever come back for adjustment—less than one in seven hundred. This is due in large part to the severe "twenty-four hour test" which every Goodyear Tube must pass with perfect score before it is allowed to leave the factory.

GOODYEAR
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TUBES

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T. E. Quisenberry, Director of one of America's greatest Poultry Experiment Stations, Box 922, Leavenworth, Kas., sends his new bulletins on "Fighting Lice and Mites," and "Feeding Growing Chicks and Laying Hens," free, to all readers. His advice has helped thousands to prevent loss and increase profits by getting more eggs, better layers, saving feed, eliminating diseases, etc. Write Mr. Quisenberry today for free bulletins and explanation on how to get free Cockerels and hatching eggs from American Poultry Experiment Station.

IF the implement dealer tells you a tractor has Hess-Bright Ball Bearings, remember they are used in the best motor cars made. And the tractor you buy very likely will be called "best."

Hess-Bright Ball Bearings

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Saving the Wheat Situation

By Donald Morton

NORTH DAKOTA is the leading spring-wheat State in the Union, normally producing one seventh of all the wheat grown in the United States. But practically all of North Dakota's wheat was destroyed by black rust in 1916. Her wheat crop in 1917 fared but little better on account of drought. In place of the 152,000,000 bushels produced by North Dakota in 1915, the crop in 1916 was cut down to 39,000,000 bushels, and in 1917 to 59,000,000.

Last fall, when their northern frigid winter began to settle upon their treeless plains, hope well-nigh departed from the breast of many a North Dakota farmer. Two bad years had practically exhausted the farmer's credit in the newer portions of the State. Cattle, horses, and farm machinery had been mortgaged to the last dollar of their value. Nothing remained but the personal credit of these wheat farmers to pull them through the cheerless winter.

There was but one gleam of light left with which to face the 1918 cropping season: a man had been elected governor who was farm-bred and farm-raised. The hard-pressed wheat growers felt sure that the new governor understood the difficulties and would help them out.

One day there came into the new governor's office in Bismarck the state commissioner of agriculture, a practical farmer like the governor. His face was long and his manner anxious.

"Governor," he said, "we're up against it; Dakota farmers cannot stand another wheat failure."

The governor looked for a minute out of his windows, where the cultivated fields come right up to the capitol. He was thinking of the millions of acres like them throughout the State, which threatened to remain cropless for lack of seed wheat.

"What can I do?" he asked finally.

"There's one thing you can do," said the commissioner of agriculture.

"What is it?"

"Call the legislature in special session to provide feed and seed for our farmers. But politically—"

"I don't care what the political effect is," retorted the governor. "Say that it is necessary and I will call it at once."

Called Legislature in Session

Before the commissioner left the governor's office the call for a special session of the legislature had been written and signed.

At the end of three days the lower house had finished its work: the farmers predominated; the work had been done with no waste of time or words. The senate shilly-shallied until it could no longer delay the inevitable: the feed and seed law was passed and the legislature adjourned. That one piece of legislation saved the 1918 wheat situation.

Ever since North Dakota became a State there has been a law upon its statute books providing that counties may issue bonds to furnish seed to deserving farmers. In all the thirty years it has been invoked less than a half-dozen times. The law was sufficient in the old homesteading days, when 160 acres made up the average farm; but to-day, with the average farm containing 380 acres, this ancient law was of little use.

The new law is designed to meet all needs. It provides that, upon the petition of fifty resident freeholders, any county, through its board of supervisors, may isuse bonds for the purchase of seed. All farmers wishing to avail themselves of the benefits of the law must file a sworn application with the county auditor, prior to March 20th, setting forth all the facts concerning past years' crop-growing and the acreage they propose to devote to the same crops the current year. The board of supervisors verifies these sworn statements and adjudges how much seed will be needed, and takes the applicant's note, bearing six per cent interest, which does not come due until after harvest. The law also provides that the state commissioner of agriculture shall buy all the seed and test it, so as to insure the farmer purchasers getting good, sound seed.

Issued Bonds for Seed

The day after the legislature adjourned, the state commissioner of agriculture started deputies through South Dakota and Minnesota buying up seed, testing it, and preparing to apportion it to the counties which issued bonds. Some twenty counties filed their applications before February 25th, the time set by the law, and fully $4,000,000 worth of bonds were issued this year.

For so many years that the mind of man runneth not to the contrary, the wheat growers of North Dakota have persisted in their efforts to raise big crops regardless of the price it might bring, how it might be marketed, or how they might be robbed in its marketing. The president of the North Dakota State College of Agriculture, standing before a convention of 3,000 farmers of his State about two years ago, emphatically declared that $55,000,000 was being lost to the farmers of North Dakota every year through unfair grading rules for grain. This amount is admittedly much too high.

Between September 1, 1910, and August 31, 1912, the terminal elevators at Minneapolis received 15,571,575 bushels of No. 1 Northern wheat, but during the same time these same elevators shipped out 19,978,777 bushels of the same grade. In other words, these terminal elevators had an excess amount in two years of approximately 4,500,000 bushels of No. 1 Northern wheat, the best that is grown. During the same period there was received of No.2 Northern wheat 20,413,584 bushels, and there was shipped out 22,242,410 bushels, making an overage of nearly 2,000,000 bushels of No. 2 Northern. This gain of about 6,500,000 bushels of wheat of the two higher grades was made up from the so-called inferior grades which were "inspected" into these elevators as No. 3 and No. 4, under the [CONTINUED ON PAGE 26]

With a good crew and a competent engineer, this outfit lost but four hours out of a straight run of thirty-three days

Machine Economy

By E. V. Laughlin

A NUMBER of years ago I bought for a trifling sum a self-reaper that the owner was about to send to the junk heap. I went over the machine very carefully, tightening loose parts, replaced wobbling bolts, checked excessive play by a liberal use of washers, and judiciously substituted new parts for those seriously worn. It did not take very long to do the work, and the expense was not excessive. Thus renewed the machine rendered efficient service for five years thereafter, harvesting hundreds of acres just as effectively as when brand-new. Intelligent repairing had practically doubled the life of the reaper.

The moral of the foregoing account is this: Many apparently worn-out machines and farm implements can be restored to efficient service through systematic repairing. Owners should think twice before throwing away the machine that is doing imperfect work. In all likelihood the right kind of "tinkering" will remove the immediate cause of the trouble.

Of prime importance is the time chosen to do the work of repairing. No one who is being rushed for the use of some particular machine can take the time to give the thorough overhauling required to reinstate it. There will be too great a tendency to do slack, "for to-day only" work. It is contrary to human nature to settle down quietly to repairing a stubborn machine when the fields are crying for immediate attention. This is probably why so many machines are thrown away just on the eve of their being used. Owners grow desperate and hurry away to buy new. All this being

Early plowing brings bigger crops

the case, the work of repairing should be begun months before the particular machine will be needed.

In beginning the work of repairing the first thing is to diagnose the machine's failings. The experiences of the last season will help greatly in this respect. After the defects are located, the remedy is generally an easy matter. Bolts, washers, rivets, iron bands, a stitch here and a turn there, will frequently restore the machine to something like its original state of usefulness. Very often dull parts will need to be sharpened and new adjustments established. Sometimes one or two new parts will be all that is needed.

If the repairing is painstakingly, very painstakingly, done, many an aged machine can be rejuvenated at comparatively slight expense.

The writer has found in his own experience that the following points should be borne in mind:

Excessive play in belts, chains, rods, gears, and the like, is accompanied by wear and slipping that invariably cause failure to perform appointed tasks. Overcome this play by all means.

Weakened or badly worn parts are best removed before they actually give way. Their break-down invariably brings a train of otherwise preventable results.

Rust and dirt are often found to be the cause of imperfect work. The same must be removed by thoroughly cleaning and oiling the machine.

Often the local blacksmith can hammer out a rod, strap, or band that will hold some weakened part securely for a long time.

After a machine has been repaired it should be stored in a dry, safe place until needed. No machine exposed to wind, rain, and snow can long remain in good condition. And especially is this true of a machine that has been repaired.

The Plowing Job That Makes You Proud

Furrows of even depth clear to the ends—clean field surfaces, well pulverized and free of the trash that nests the eggs of cutworms, wireworms and grubs—uniform rows with back furrows laid just as you want them—that is OLIVER plowing. You can depend upon it to break up the breeding places of crop destroying insects—to promote the full growth of your plants.

All Oliver Plows are furnished with combined rolling coulters and jointers, quick detachable shares, with chilled or steel bases.

2 Bottom Plow, $175 *3 Bottom Plow, $225*
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(Prices Subject to Change Without Notice)

Oliver Chilled Plow Works
South Bend, Indiana

There's an Oliver Dealer in Every Town

OLIVER
Tractor Plows

Are YOU a Square Peg in a Round Hole?

Does the month of August find you farther ahead than you were six months ago? Be honest with yourself: Are you getting somewhere, or is it the same old grind?

These young men, all from the same Pennsylvania town, were not always earning an average of $50 a week. They did not always have the same extraordinary future to look forward to. Only a few months ago one of them was working in a sand quarry for small wages. Another one of them was driving a tea wagon.

It happens that one of the boys inquired of FARM AND FIRESIDE for a proposition to act as representative. He undertook the work, and was so amazed at his success that he induced the other five to join him. None of them now earns less than $50 weekly.

We can offer you a proposition that will afford the same extraordinary opportunity. If you really want to earn more money,

Write To-day for Full Particulars

Agents' Division, FARM AND FIRESIDE, Springfield, Ohio

Farmer Athletes

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JESS WILLARD, champion heavyweight boxer since 1915, when he took the title from Jack Johnson, was born on a farm near Westmoreland, Kansas. Jess has farmed the greater part of his life, and now owns many acres of good land. He plans to return to one of his Kansas farms when he retires.

THE star outfielder of Connie Mack's pennant-winning Athletics was christened Home-Run Baker in 1909, when, in a world's championship game, he went to the bat with the bases full and smashed out a home run, tallying four for the Athletics. When he tired of baseball he retired to his farm in Maryland.

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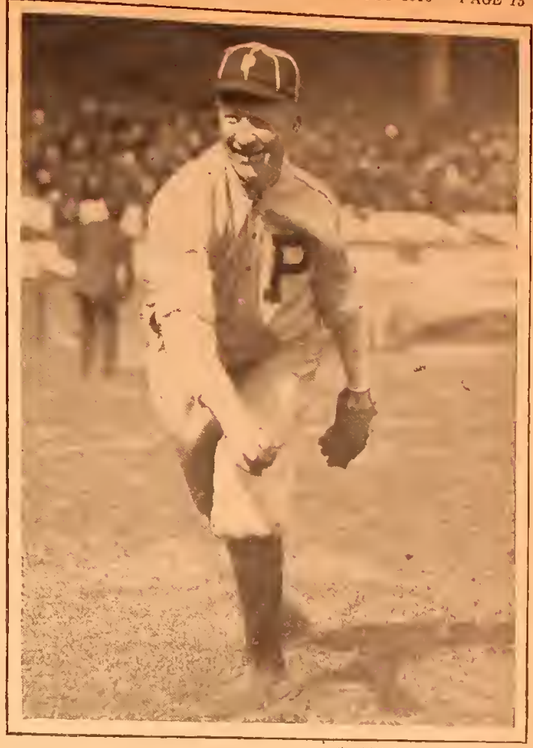
GROVER CLEVELAND ALEXANDER, the star pitcher of the National League, and one of the greatest pitchers of all times, was born in a hut miles from nowhere, out in the wilds of Nebraska. He learned to pitch by throwing stones at coyotes, cayuses, and "sich critters." Alexander, now an artillery-man, is "over there" throwing big shells at the Huns.

OUT at Camp D[illegible] near Des Moines, Iowa, there is a[illegible]te soldier earning $30 a month who[illegible]arned as high as $8,000 for a little [illegible]our's work. He is Earl Caddock, [illegible] champion heavyweight wrestler o[illegible]world. Caddock is an Iowa farm prod[illegible]and is the pet and pride of the Hawke[illegible]ate.

THE late Frank Gotch, champion heavyweight wrestler of the world, was born on a farm. He made as much as $32,000 in an hour on the mat, one time, and he always invested his earnings in farm land. He said that an Iowa cornfield was surer than an Alaska gold mine. He knew, too, for he had hunted gold in Alaska in his early days, and really got his wrestling start there.



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WALTER JOHNSON, the star pitcher of the American League, and in many respects the greatest pitcher baseball has ever produced, was born on a farm near Humboldt, Kansas. Every year when the baseball season is over he hikes back to his native State and his 160-acre farm.

Copyright by Underwood & Underwood, N. Y.

ALONG in Octob[illegible] last year the hero of the hour was De[illegible]ban, otherwise known as "Red" Faber, who is credited with having won three out of four games which clinched the 1917 world championship for the Chicago White Sox. He hails from Iowa, and proudly boasts that he is a real, for-sure farmer.

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SAM CRAWFORD, the hard-hitting outfielder for the Detroit Tigers for many years, comes from the alfalfa belt of Nebraska. He modestly admits that he can "sure slam the ball for long hits," and lays a good part of his batting eye and strength to the good old days and food of his early farm career.

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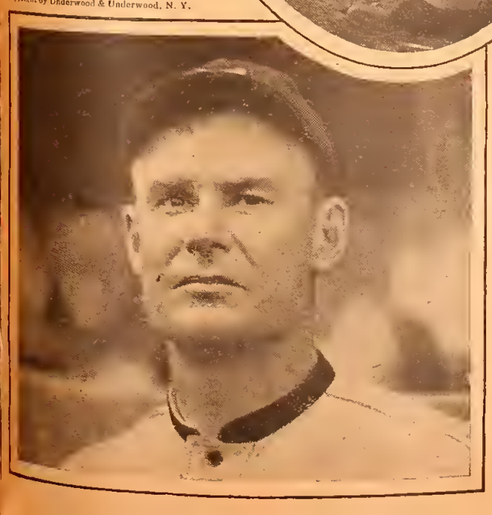

IF YOU mention Napoleon to the average American, he thinks immediately of Lajoie instead of Bonaparte. Lajoie put in twenty-one years in big-league company, making his entry into the national game in 1896 with the Philadelphia club. For many years he has lived on his farm near Cleveland, and gives much credit to the simple life of the farm for his success on the ball field.

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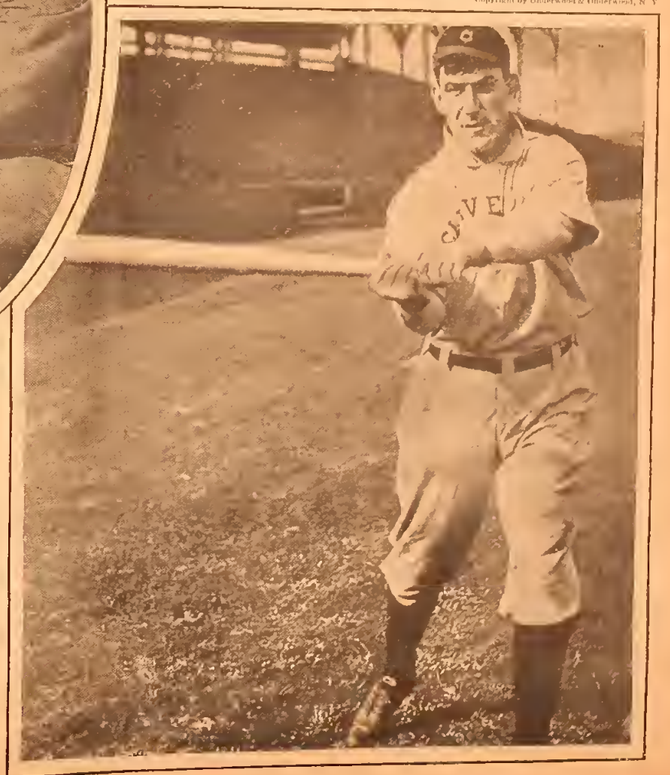

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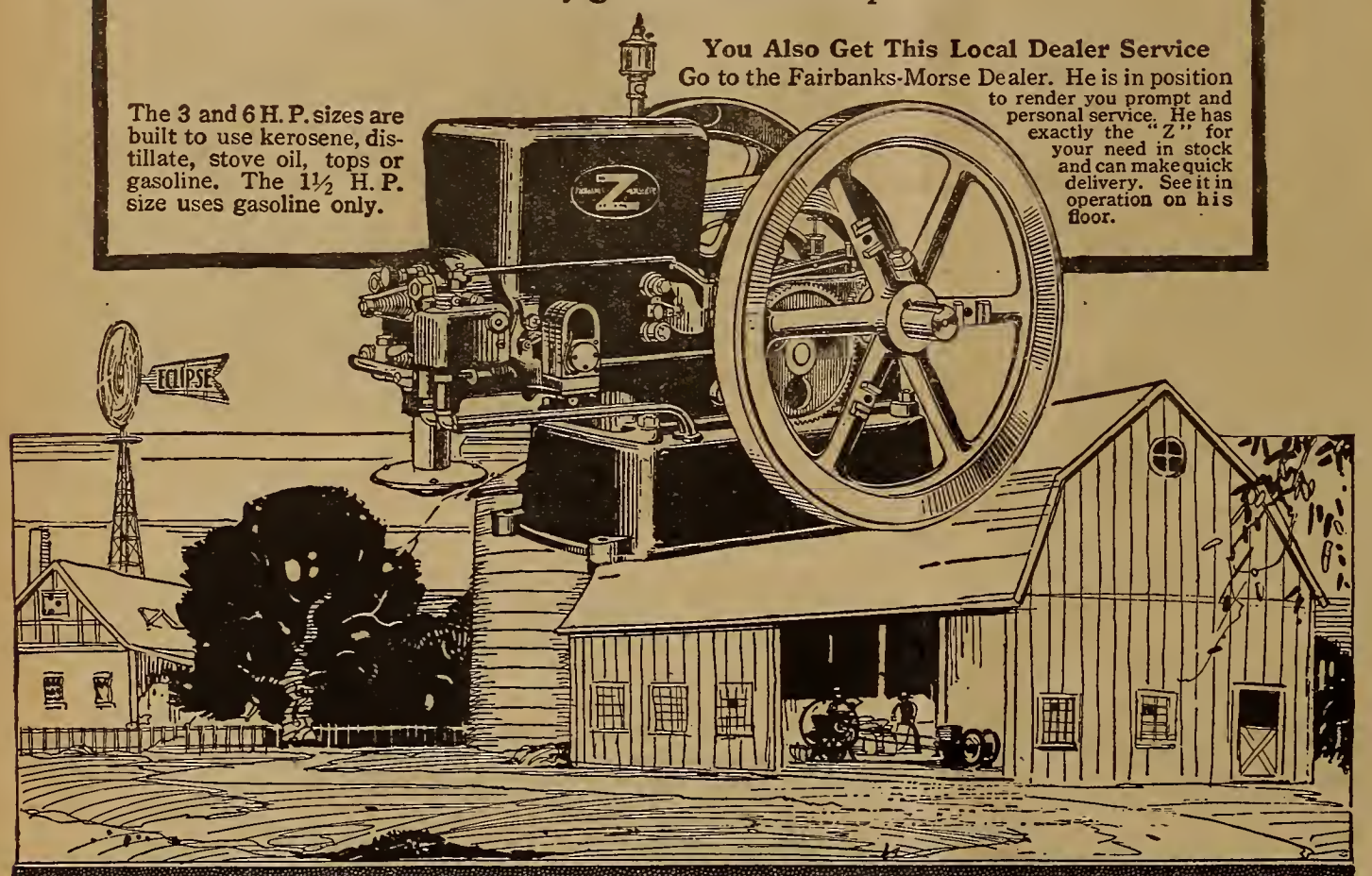
GENERATIONS know that the name-plate "Fairbanks-Morse" on any product assures quality.

This is the famous "Z" engine — all sizes with more than rated power — that over 150,000 farmers have backed with $10,000,000—to do their work best. No farm engine ever before has made such a record.

Cuts fuel costs in two — the 3 and 6 H. P. engines giving more than rated power on *kerosene* at *half* gasoline war-time prices.

You Also Get This Local Dealer Service
Go to the Fairbanks-Morse Dealer. He is in position to render you prompt and personal service. He has exactly the "Z" for your need in stock and can make quick delivery. See it in operation on his floor.

The 3 and 6 H. P. sizes are built to use kerosene, distillate, stove oil, tops or gasoline. The 1½ H. P. size uses gasoline only.



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CORN HARVESTER Self Gathering for cutting Corn, Cane and Kaffir Corn. Cuts and throws in piles on harvester. Man and horse cuts and shocks equal to a Corn Binder. Sold in every state. Price only **$25** with fodder binder. The only self gathering corn harvester on the market, that is giving universal satisfaction.—Dexter L. Woodward, Sandy Creek, N. Y., writes: "3 years ago I purchased your Corn Harvester. Would not take 4 times the price of the machine if I could not get another one." Clarence F. Huggins, Speermore, Okla.: "Works 5 times better than I expected. Saved $40 in labor this fall." Roy Apple, Farmersville, Ohio: "I have used a corn shocker, corn binder and 2 rowed machines, but your machine beats them all and takes less twine of any machine I have ever used." John F. Haag, Mayfield, Oklahoma: "Your harvester gave good satisfaction while using filling our silo." K. F. Ruegnitz, Otis, Colo.: "Just received a letter from my father saying he received the corn binder and he is cutting corn and cane now. Says it works fine and that I can sell lots of them next year." Write for free catalog showing picture of harvester at work and testimonials.
PROCESS MFG. CO. Salina, Kansas.

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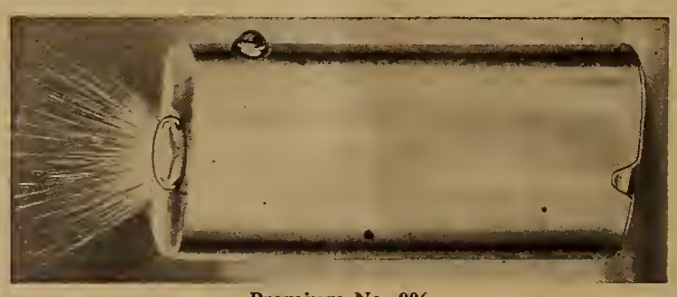
Of This Handsome FLASHLIGHT

For Boys and Girls



For Men and Women

Premium No. 906

Any live boy or girl can earn this flashlight in an hour. See your neighbors and get *three* of them to pay you 25c each for FARM AND FIRESIDE one year. Send us the 75c and the names and addresses and we will send you this dandy R. V. G. FLASHLIGHT, complete with battery and lamp, by parcel post prepaid.

Don't Wait, Get Busy Right Away

We have only a small stock of flashlights. Write your names on a sheet of letter paper and say, "Send me your R. V. G. Flashlight." Send money by P. O. order or stamps. ADDRESS

CLUB-RAISER DEPARTMENT
FARM AND FIRESIDE SPRINGFIELD, OHIO

Saving the Grain

By H. H. Haynes

OUR Government estimates that the farmer loses three per cent of his grain each year through careless threshing methods, and very often it is the farmer himself who is most to blame. Anxious to speed up a wearisome but very necessary job, he forgets that the big idea is to get as much grain as possible instead of getting the work done in the shortest time.

While the causes of waste are comparatively few, every precaution should be taken for its prevention. Grain threshed when it is tough and damp is sure to represent a loss. It is impossible for the separator to remove all the kernels, and an unbelievable amount of grain goes over with

Starting on the run

the straw. The value of the time lost in waiting for the bundles to dry will be more than made up by the saving in grain.

A competent separator man will keep his machine adjusted and running at the proper speed, but he often becomes careless and thinks more about the number of bushels going into the feeder than of how much grain gets to the bin. From long association many farmers understand threshing machinery well enough to find out for themselves if everything is working properly, and should not neglect to see that adjustments are made whenever needed.

Where the protable elevator is used the waste in transferring grain from wagon to bin is very slight. However, not every farm is so equipped. Shoveling grain is hardly child's play under the best of circumstances, and if the man with the scoop is compelled to reach a high door or work in a cramped position, not all the grain will reach its intended destination. A blanket

One of the tractor's many uses

on the ground and one from the grain door to the wagon will save considerable.

Careless and fast pitching into the machine is another cause of waste. On a neighborhood run, where help is traded back and forth instead of having a hired crew, more care is taken, as all the men are farmers and remember that their turn will be next. But even your best neighbors get in a hurry at times, especially if they happen to be on the tail end of the run and it looks like rain. A separator will not stand crowding. The machine is set at what is considered a fair pitching speed, and at that speed is supposed to handle the grain properly. Overloading cuts down the speed, which means a proportionate loss in efficiency, with the result that much grain is carried over into the stack.

Our Sea Fighters

[CONTINUED FROM PAGE 3]

...racter of the diet changed with the ...sons and climatic conditions.

No one, except those who have that ...ht, knows where our fleet is at present, ...ut when we are at peace the Atlantic Fleet assembles in West Indian waters in winter and returns north in spring, and ...naneuvers off the Atlantic coast of the ...nited States.

The Pacific and Asiatic Fleets are also favorably stationed. The Atlantic Fleet gets target practice at Guantanamo Bay, Cuba, the largest rifle range in the world. All fleets are afforded opportunities for baseball and for boat races, and on board ship are the latest moving-picture machines, the band, and various minstrel and other amateur entertainments.

Jacky's life is a strenuous one, however, in these times when everything is rush in order to make men fit, and much of the novelty of the situation wears off rapidly. But the enlisted man is brave and inspired with noble impulses.

Every recruit is provided free with an outfit of uniform clothing, bedding, and other necessities, amounting to $60. This outfit includes, among other things, woolen blankets, jack-knife, handkerchiefs, tooth brushes, scrub brushes, shoe polish, mattress and mattress cover, neckerchief, high ...nd low shoes, spools of cotton, silk and ...nen thread; all articles of uniform for ...ummer and winter, including overcoat, ...weater, gloves, bathing trunks, and gymnasium shoes. He may not get all this outfit at once, but he will get clothes suitable for the season and can obtain his other clothing when necessary.

Many persons do not understand about ...he various navy auxiliaries. There is the ...aval Reserve, the Naval Auxiliary Reserve, the Naval Coast Reserve, the Volunteer Naval Reserve, and the Naval Reserve Flying Corps. Some of these are composed of ex-officers.

Have Many Interesting Schools

An interesting feature of the navy is the school system. There are navy electrical schools at the navy yard, Brooklyn, New York, and at Mare Island, California. An artificer school is at Norfolk, Virginia; Yeoman schools are at Newport and San Francisco; Hospital Corps training schools are at Newport and San Francisco; musician schools are at Norfolk, Great Lakes, and San Francisco; a machinist school is at Charleston, South Carolina; a coppersmith school is at Charleston; an aëronautic school is at Pensacola, Florida; seaman gunner schools are at Washington, D. C., and Newport, Rhode Island. These are maintained all of the time. Since war was declared many others have been added for intensive training.

The navy yards are at present the busiest and most closely guarded places in the Navy Department. Sentries are continually passing back and forth, and a war spirit pervades everywhere, though there may be no noise or apparent bustle.

In times of peace about 20,000 out of 90,000 men are accepted. Not so in war, however, when the percentage of acceptances is of necessity larger and minor defects are given more latitude. Every applicant must present, if a minor, a certificate of birth and evidence of United States citizenship.

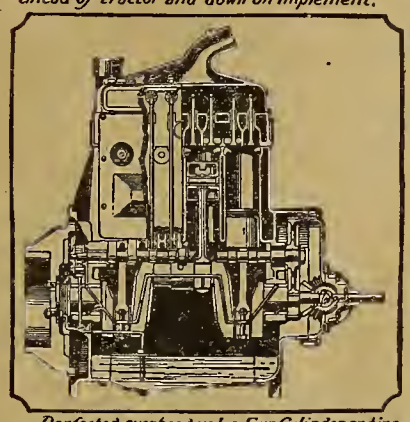
Turning raw men into seamen in a few weeks or months requires very intensive training, but that is what we are trying to do. They are awkward at first, but vigorous drilling helps much. It is an impressive sight to see how the recruit realizes the seriousness of his position and to note his extreme loyalty to the ship on which he is stationed and to the commander in charge.

Every movement of recruits is now guarded by the navy, and our railroads are doing what they can to help by putting trains at their disposal. Whatever may be the pressure of the future, to-day the railroads furnish the recruits with tourist sleepers and a physician accompanies each train.

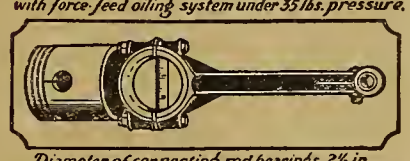
Do they get homesick—these fine young fellows who start out to life on the sea and no one knows what fighting? Well, sometimes; but they not only are allowed but are commanded to write home once a week. "It's thrilling and wonderful experience," says the Jacky, although when you ask him he may be passing up bags of powder, scrubbing decks, painting walls, or washing his clothes. It is the American spirit—that great American spirit that is working for a great cause. Besides, who knows? Perhaps sometime he will be a high officer.

No Other Tractor Has So Many Good Mechanical Features=

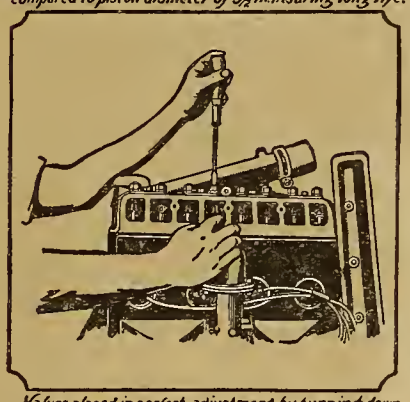
Electric lighting system throws light both ahead of tractor and down on implement.



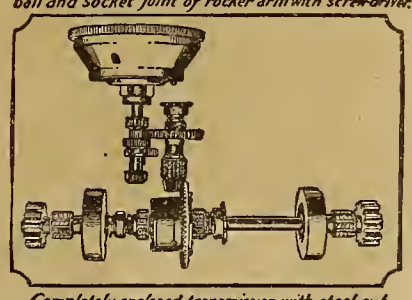
Perfected overhead-valve Four Cylinder engine, with force-feed oiling system under 35 lbs. pressure.



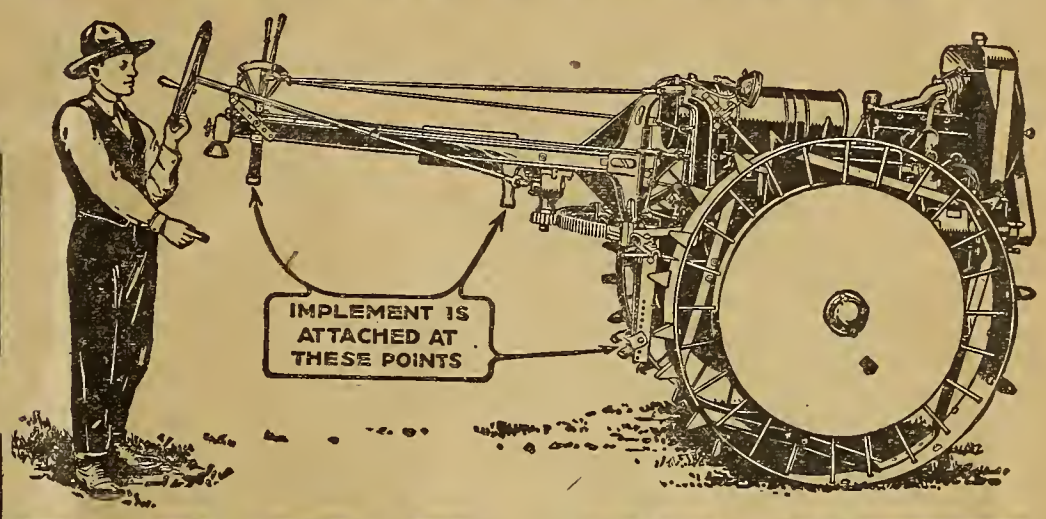
Diameter of connecting rod bearings 2½ in. compared to piston diameter of 3¼ in. insuring long life.



Valves placed in perfect adjustment by turning down ball and socket joint of rocker arm with screw-driver.



Completely enclosed transmission with steel cut gears, Hyatt bearings, differential lock, and brakes



MOLINE UNIVERSAL TRACTOR

It Solves The Farm Help Problem

EVERYONE who knows what a tractor should do, agrees that the Moline-Universal has three distinct advantages over all other tractors: lighter weight; greater economy and ease of operation; ability to do all farm work, including cultivating; and ONE-MAN control of both tractor and implement from the seat of the implement, where you have always sat, and where you must sit in order to do good work.

Aside from these distinct advantages which the two-wheel construction gives, the Moline-Universal Tractor, Model D, is still the best tractor on the market. In every detail it has been refined and perfected to the utmost limit of modern engineering knowledge.

Self Starter—Electric Lights

The Moline-Universal is the only tractor regularly equipped with a complete electrical starting, lighting, governing and ignition system. The starter saves many hours of productive work, besides eliminating back-breaking labor. Electric lights enable the tractor to be worked at night during rush seasons.

An electrical governor perfectly controls the engine speed. By simply turning a dial, within easy reach of the operator, engine manitains any speed from ½ to 3½ m. p. h., and automatically handles all changes in load.

Perfected Four-Cylinder Engine

The perfected four-cylinder engine is the latest development in overhead-valve construction. With a bore of only 3½ inches a 2½-inch crankshaft is used. The strength and thickness of the crankshaft eliminates all vibration. Oil is forced through hollow crankshaft to all the main and connecting rod bearings under a pressure of 35 pounds to the square inch. The bearings float on a film of oil, so their surfaces never touch.

Double valve springs give unusually quick action with soft seating. Rocket arms are swiveled on ball and socket joints that may be turned down with a screw driver, placing the valve mechanism in perfect adjustment at all times. This engine develops unusual power and is very economical in operation.

Steel Cut and Hardened Gears

The transmission is completely enclosed, with drop forged, hardened, and cut steel gears running in oil that reduce power loss to a minimum. All gears are mounted on heavy duty Hyatt roller bearings, with high grade ball bearings fitted with adjustable collars to take up end thrust. Fifteen Hyatt roller and five ball bearings are used in the Moline tractor. Seven splined shafts are used in locking gears to shafts. This is the strongest construction known, and has the additional advantage that it makes the transmission easy to take apart.

For pulling in soft ground, the two drive wheels can be made to revolve as one by means of a differential lock, doubling their pulling power.

Complete Enclosure of All Parts

The final drive is completely enclosed in dust tight shields, the edges of which are sealed by heavy grease used to lubricate the gears. Every part of the Moline-Universal tractor is protected against friction and wear.

All working parts are accessible. All the weight is so well balanced on two wheels that the rear end of the tractor can be supported with one hand.

The Moline-Universal Model D will give you longer and better service at less expense than any other tractor. It is built for positive reliability.

Our catalog describes the Moline-Universal in detail. Send for it. Address Department 60.

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—ED. H. WITTE, Pres.

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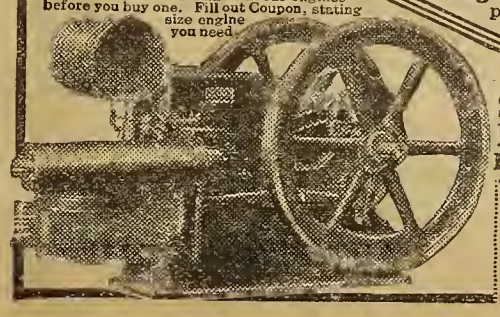

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Works in any kind of soil. Cuts stalks, doesn't pull like other cutters. Absolutely no danger.

Cuts Four to Seven Acres a Day with 1 man and 1 horse. Here is what 1 farmer says:

Dear Sirs:—Your Perfect Corn Harvester absolutely has anything beat I ever saw. Cut 90 shocks, 12 hills, first day. I am sure I never invested money any more profitably in my life. My Harvester paid for itself in three days.
Respectfully, F. J. REDELMAN, Kouts, Ind.

SOLD DIRECT TO THE FARMER
Send for booklet and circulars telling all about this labor-saving machine; also testimonials of many users.
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Dept. 27 Lincoln, Illinois

A Pond-Bed Garden

By Esther Reeks

UNTIL last year we had no suitable place for a garden, but the draining of a pond previously used for fish culture and ice-making promised a favorable site except for poor drainage.

The first move was to provide drainage, and this was done by making a ditch around three sides of the garden plot which would cut off the water supply from several springs that issued from higher ground. The garden plot was leveled and several cross ditches cut to connect with the outside ditches, so that, when desired, water could be introduced into the cross ditches with which to irrigate the garden. We then felt that we had control of the moisture situation during wet seasons and dry alike.

The drainage and preparation prevented plantings until too late for best results. During the summer we sold

Profit from a pond bed

$60 worth of vegetables. During the winter we marketed a large quantity of celery and about a ton of winter squash.

The squash was planted along the banks of the drainage ditches. We also had a generous supply of roots, cabbage, etc., stored for winter use, so that the total income from our little half-acre garden footed up to $150, in addition to a large part of a good living for our family.

This year our garden promises to be much more productive. We also feel sure of an easy and constant means of irrigating our garden, thus being able to get a good yield when drought would otherwise interfere.

An Acre Garden at Eighty

NEVER before was gardening so popular and essential, since hunger is facing entire nations which have so long lived in comfort. Grandparents and grandchildren alike have their gardens, which are helping mightily to furnish uncountable family tables with an abundance of good food, thus allowing the staple field products to go to feed the fighters and workers overseas.

One productive garden of an acre area was last year planted, tended, and harvested by an Osceola County, Michigan, gardener, eighty-three years old—J. F. Proctor. This garden was devoted mostly to what could be described as main staples —potatoes, cabbage, onions, sugar corn, and root crops for winter storing for famliy use. In addition, Grandfather Proctor had entire care of a kitchen garden of one-quarter acre, all devoted to garden supplies, including small fruits usually consumed as freshly gathered.

Besides his gardening work, Mr. Proctor cut and shocked three acres of field corn in one week, working during the forenoon of each day. Now his chief desire is to have life and strength to keep his gardens producing food to help with his bit to overcome the world's arch enemies to peace and prosperity.

A Garden Gate Income

I FEEL sure many FARM AND FIRESIDE readers would like to know how I make a nice little income at home, right at my garden gate. For my cash comes in simply by selling the surplus vegetables.

When we went to our little farm on the edge of a Mississippi town, there was a lot of repair work to be done. The first year the chickens got most of the benefit of the garden. The next year I persuaded Father to enclose the garden with chicken-proof wire fence on the plea that I could sell enough to pay for the wire. The cost of enclosing was $25.25. The sales from June to September, 1917, were $25.75.

Geesé as Crop Weeders

By L. E. Armour

THE fact is well known that geese are the best grazers of all poultry kind. And of late years there is a growing tendency to make use of geese as weeders of crops, particularly cotton, tobacco, and some other cultivated crops at certain stages of growth, as corn and the sorghums, also fruit orchards.

Geese have a preference for young and tender grass and weeds, and after cotton, tobacco, corn, and sorghum have made sufficient growth for the plants to become somewhat tough, geese will patrol the fields, grazing on the sprouting weeds.

My own experience has proved the value of geese as aids to crop-growing, and where cotton or tobacco, or both, are raised, the services of the geese are well worth while, even though there were no other advantage in keeping them. But when raised mostly by grazing in cultivated fields, there is an excellent profit from geese for selling to the holiday trade and to supply breeding stock as well.

Of course, geese do not take the place of the cultivation of crops. Their special help is in cleaning the weeds, grass, and insects from between the plants and in the hills, and destroying the grass and weeds missed by the cultivator. Rain or shine, wet or dry, Sunday and week day, the geese remain on the job.

Where cotton, tobacco, corn, and sorghum are fairly well cultivated, from one to three geese to the acre will be sufficient; but when there is considerable pasturage around the field margins, three to five geese to the acre will thrive.

My geese keep practically free from disease and are not troubled by hawks or other poultry enemies or parasites. A flock of about 30 head is sufficient to keep our cultivated fields free of weeds. I have found no other fowls that realize me as much profit from the capital invested, and since the female geese continue productive

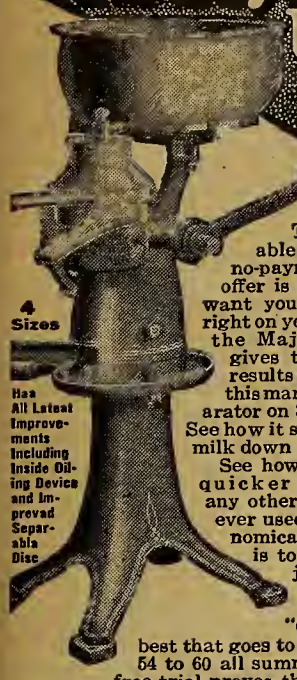
Off for a day's weeding in cotton, corn, and tobacco fields

as breeders for a dozen or more years the renewing of breeding stock is a small matter.

It may be thought that the practice of using geese and goslings for weeding crops would not work so well farther north; but in all cases where the cultivated crops become tough and unpalatable after a few weeks' growth, geese will give good results as weed destroyers, for the sprouting weeds will be eaten first.

Another advantage over chickens and turkeys that strongly appeals to me is the short period that goslings require special care after hatching. After the first week they need but little attention, except one or two feeds of ground grain or mill feed, and a dry place in which to sleep. When two weeks old they can run in the corn and cotton fields with the old breeding geese, and one small feed of grain daily will keep them growing nicely.

No Money Down —No Payment Until 60 Days



This remarkable no-money-down, no-payment-until-60-days offer is made because we want you to actually see right on your own place why the Majestic Separator gives the most efficient results at least cost. Try this marvelous Cream Separator on 30 days' free trial. See how it skims warm or cold milk down to the last drop. See how much easier and quicker it works than any other separator you've ever used. Find how economical it is, how easy it is to clean. Find out just as others have by actual test. Mr. Penrod says: "Our cream is the best that goes to creamery. Tests 54 to 60 all summer." If 30 days' free trial proves the "Majestic" the best and you decide to keep it, then make first small payment 60 days after it arrives and balance in equal 60-day payments thereafter. This gives you a full

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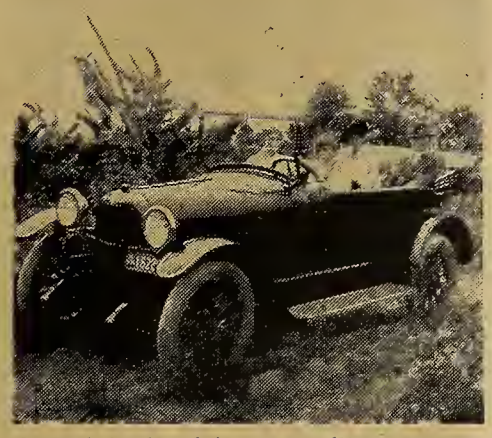
Correct Pressure

By A. H. Pulver

CORRECT tire inflation can only be obtained when the weight of the car is known. On account of the advance in price, one should look fully into the care of tires and how they may be made to wear longer. Correct inflation is the most important thing to watch. In trying to correct the evil of underinflation, the motorist often leaps to overinflation.

A tire with too great a pressure transmits to the car every jolt and jar, and is harmful to the automobile and uncomfortable to those riding. The right adjustment cannot be obtained by guesswork. How to work out the problem correctly



One of the family's most willing servants

according to the weight of the car is told by the service manager of one of the large tire manufacturers, who says:

"It is impossible to get proper tire inflation when only the size of the tire is known. The old method of placing 201 pounds to the inch, cross-section diameter of the tire, regardless of the weight of the car, should be forever discarded.

"The correct table of inflating pressures under prescribed loads is given below. Each motorist should make it a point to know the weight of his car under average load and from this weight, together with the size of his tire, determine the correct air pressure."

Tire, inches	Inflation, pounds	Load, pounds
3	45	375
3½	55	570
4	65	815
4½	75	1,100
5	80	1,300
5½	85	1,700
6	90	2,000
7	100	2,720

Saving the Windows

By S. C. Burt

THE windows in automobile curtains may be preserved for a long period of usefulness if reinforced with ordinary adhesive tape or plaster. To accomplish this

A truck shortens the haul

it is best to secure the tape in inch-width rolls and with a sharp knife cut each roll into three equal slices. Fasten the narrow strips of plaster firmly at regular intervals to the celluloid, both horizontally and perpendicularly, permitting the tape to overrun a little at each end on to the curtain fabric.

The reinforcement should be applied to each side of the window. The spaces should be gauged so that the effect is symmetrical. When finished the strips can be blackened with ink or lampblack.

Don't blame him, Mr. Ford Owner.

Your tire costs depend on YOU

YOU have the remedy for high tire cost within easy reach. Increase your tire mileage and keep your cost per mile for casings at before-the-war figures by equipping your Ford with the

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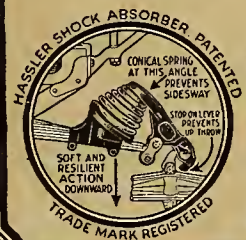
The Hassler Shock Absorber lifts the weight of the car off the tires. It cushions every jolt and jar. It prevents sidesway and upthrow, reduces rattling and vibration.

The Hassler Shock Absorber will immediately increase your tire mileage. It will pay for itself every time you ride 3,000 miles. It will enable you to get thousands of extra miles out of every set of casings.

It will help you do your little to avert a rubber famine among our gallant Allies, and keep down the first cost of tires here at home.

It will make your Ford ride as smoothly as a $2,000 car.



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Write today for FREE TRIAL BLANK and we will have a set of Hasslers put on your Ford without a cent of expense to you. Try them 10 days. Then, if you are willing to do without them, they will be taken off without charge. Don't ride without Hasslers simply because someone discourages you from trying them. Accept this offer and see for yourself. Over 400,000 sets in use. Write today—NOW.

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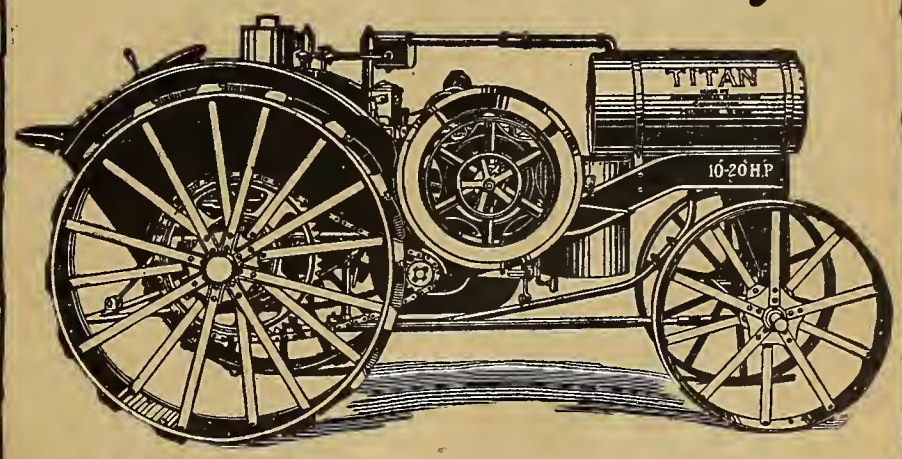
Safe Tractors to Buy



THERE is one safe way to be sure you are buying a satisfactory tractor. Buy from a concern that has had years of experience with all kinds of tractors and power machines for the farm.

A tractor can be considered safe only when it has been tested and tried, on thousands of farms, under every combination of soil and climate conditions, and has given a satisfactory account of itself everywhere.

International, Mogul and Titan Kerosene Tractors, as sold today, have over 12 years of tractor manufacturing, experimental, and field service behind them. These sizes and types are the ones that have stood every test.

Beyond question these are safe tractors to buy. They all operate successfully on kerosene and other low-grade fuels. They are sold by a concern that has sold for years all kinds of satisfactory machines to be operated by tractor power, thus assuring good work at both ends of the drawbar and belt.

We invite investigation and comparisons. See the local dealer who sells our tractors, or write us for complete information about a safe tractor to buy for the work on your farm.

International Harvester Company of America
(Incorporated)
CHICAGO U S A
Champion Deering McCormick Milwaukee Osborne

BEST IN THE LONG RUN

FAIR TREATMENT

Like a Hambletonian Horse

THE all-around usefulness of the Hambletonian Horse is proverbial on the farm. A fine looker, yet a husky worker. At the plough he pulls with the best; in a neat roadster he steps a gait with the speediest. He rides fine, or he will carry a load. You know him, you men of the farm, for a Kentucky thoroughbred, and a pulling horse in one.

Goodrich Tires are the Hambletonians of tires. Fine lookers, speedy, yet husky workers for heavy loads and rough going, they fit all-around service of the farm as no other tires.

Like the Hambletonian Horse, they have pedigree. The scientific and workmanship skill of the oldest and largest rubber factory is in them. Like the name Hambletonian, Goodrich stands for prestige.

But Goodrich does not ask you to buy on blind faith. It proves its tires for you as an assayer proves gold, or a chemist food, before it assures you the tested service of—

GOODRICH SERVICE VALUE TIRES

That word, *tested*, is the last word in tires for the farmer. It means that Goodrich Test Car Fleets, six of them, throughout the year 1917, battled Goodrich Tires from state to state, and the tires proved their durability in mileage that ran to 4,178,744 tire miles.

Think of it, more than 4,000,000 miles of mileage vouch for the sure service of Goodrich Tires. The roads of every region of our country—perhaps the roads that run by your own farm—vouch for their strength.

These tires coin themselves into real money for you, the same as your ploughs and your reapers.

Whatever tires you need; for an automobile large or small, for your truck, bicycle, or motor cycle, the Goodrich brand is your guide to sure service. You know it of old from the service of the Goodrich Hipress Boot.

The husky, generous size of Goodrich Pneumatic Tires tell you their strength at a glance. Actual working tests show Goodrich Truck Tires outwear steel.

Where You See This Sign Goodrich Tires are Stocked

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The World's Standard

Don't wait until the last minute to order your Kalamazoo. While we carry enormous stocks and can invariably ship promptly, the big demand this year means that some who delay may be disappointed. Order today—be on the safe side. Have your Kalamazoo Silo and your Kalamazoo cutter ready when your corn is just right.

Life-time Tile Silos—proof against weather, moisture, acid, heat, vermin. "Permanent as the Pyramids."

Wood Silos—choice of four best woods. We can save you money on *guaranteed* silos that are proven right by 27 years of service.

Write today for catalog and easy payment plan.

Kalamazoo Tank & Silo Co., Dept. 243 Kalamazoo, Mich.

Capewell Horse Nails

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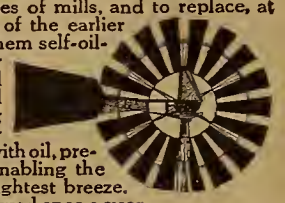

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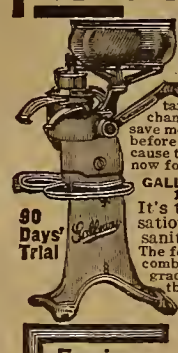

The season's one big bargain on Galloway's Sanitary Cream Separators! Because we need room in our factories to build tractors, we are pricing at figures way below the usual low price, about 4000 1918 model Galloway Sanitary Cream Separators. Here is your chance to get a genuine Galloway and save more money on it than ever possible before. But you must write at once because the offer expires in 30 days. Write now for this new low price proposition.

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It's the sensation of all separators. Sensational in construction, clean skimming, sanitation, easy cleaning and durability. The features of the Galloway Sanitary Separator combine the new and best advantages of all high grade separators. Buy a Galloway and you get the best of all embodied in one perfect machine. Four big sizes at four low prices. Every size guaranteed to skim to rated capacity. Sold on 180 milking test in your own dairy before you decide to keep it.

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Galloway also makes Engines, Spreaders, Tractors and sells them direct, too, at lowest factory prices. Don't order any implement until you get Galloway's factory price.

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Get this money-saving buying guide in your hands before you buy. It points the way to immense savings that will amount to hundreds of dollars on your season's supplies. Close shipping points save your freight. Write today for book.

WM. GALLOWAY CO., Box 393 Waterloo, Iowa

The Care of Cows

By A. C. Palmer

PROPER care of dairy cows to many persons means simply plenty of feed and a warm bed. These are certainly the most important things to consider, but the man who lets it go at that will find a larger percentage of boarder cows than the man who tries to improve his conditions at every point.

As an example, one may give his cows sufficient feed to keep them in fine shape, yet, unless he studies the production of each cow and the things her system demands, he will find his feed bill is out of all proportion to the milk produced. I doubt if one farmer in a hundred has made a real effort to understand the relation of the

Future top-notchers

different food elements to milk production and each individual cow's desires. Study this is a very vital point and ordinarily necessary to success. Here, then, is one instance where care means considerably more than merely feed volume.

Then there is the matter of water. A cow's system demands enormous quantities of water, in winter as well as in summer, and unless this is furnished her in cold weather in palatable form she will not drink it, and the yield will drop. Thus there is the necessity of warming the water slightly by the aid of a tank heater or by watering in stalls by the drinking-cup system.

Another important thing is the manner in which a cow is bedded. If her stall is not kept clean, if she must sleep upon the frozen, manure-covered ground, unprotected by straw or bedding, her yield will be lowered to a material extent.

Milking and feeding a cow at regular intervals is essential to best production and materially enters into the care of the dairy herd.

Good ventilation is an essential many times overlooked. A barn steaming with body heat and heat from manure not only

Some of the year's calf crop

keeps a cow's vitality at low ebb, but also undermines her health and power of resistance to disease.

Currying cows is largely overlooked. A good currying daily stimulates blood circulation in a cow just as surely as a bath does a human. It will keep her coat in good, clean, healthy condition, which in turn will aid in keeping her body warm. This alone, competent authorities claim, will increase the yield 10 per cent.

Proper care of dairy cows presumes kind treatment. A harsh-voiced, club-striking attendant will affect the milk yield just as surely as will a lack of food.

Mutton for Fresh Meat

By James Blaine

MUTTON should be used to a greater extent for a supply of fresh meat. It is as cheap as beef, and the stewing cuts are the cheapest meats that can be purchased. Cleanly dressed mutton is just as palatable as any other class of meat, and many persons think the flavor is much better.

A whole or half carcass of lamb can be used by the average family before it will spoil. Thus, if a few sheep are kept on the general farm a constant supply of fresh meat is at hand. A 70-pound lamb will dress out about 55 per cent, or 38.5 pounds. This amount of meat can be used by the ordinary family before it will spoil.

Mutton has not been used to any great extent as food by the American people. This is due to the strong taste and odor caused by improper methods of killing. Spring lambs will produce cheaper meat than will any other class of meat-producing animals.

The sheep can be turned out in the pasture and orchard or any small lot in the spring, and they will eat the weeds and grasses that other stock will not touch. Thus they keep the weeds down and also furnish a supply of good fresh meat.

Covered Hog Wallow

By S. C. Burt

SINCE the hog wallow is intended to provide comfort as well as cleanliness, the placing of a sunshade above it adds greatly to its efficiency as a cooling agency. The wallow shown in the illustration is 20x 12 feet in dimension, and is 18 inches deep. Six inches of the retaining wall is above ground. The owner, Lovett Williams, Benton County, Indiana, is enthusiastic over the general usefulness of the wallow, which

not only keeps his hogs in good creature comfort, but also enables him to dip them at short intervals with no extra trouble.

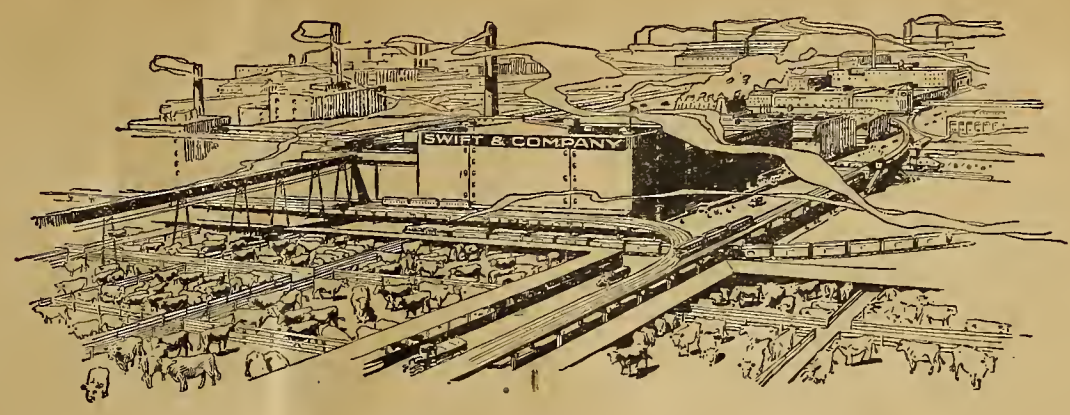
The structure stands in an open lot which is perfectly dry underfoot at all times. There is no temptation for the animals to take a mud bath. Consequently, they seek the basin which has been provided. There is always plenty of air drawing through under the cover, and the hogs spend long hours in it, especially during the hot weather. Sometimes it becomes filled to capacity. The tank, of course, is filled from a storage reservoir near the windmill. There is an underground drain for emptying. A runway at one end provides a means for the animals to get in and out without climbing over the side.

Sheep as an Investment

By John Coleman

SHEEP return a greater profit for every dollar invested than any other class of live stock. None of the disadvantages, the most important of which are dogs, parasites and disease, should discourage the flockmaster. Proper care and management will control and largely eliminate these troubles.

Sheep produce two cash crops a year—wool in the spring and lambs in the fall. They can be grown and maintained upon a smaller percentage of roughage and a smaller percentage of grain than any other class of live stock. They will clean up the weeds from the farm and convert other rough feeds into a marketable product. As a source of fresh meat, which is wholesome in character and flavor, a flock of sheep is the best. This fresh meat is the most healthful class of meat because fewer sheep are condemned than any other class of live stock.



A business that is as big as its job

KEEPING a nation of over 100 million people regularly supplied with meat and meat products is a big and complex job.

And a still bigger job when to it is added the needs of the American soldier here and in Europe and of the Allies as well.

It is a job of converting the live stock of the West into meat and meat products and distributing them in perfect condition over long distances to the consuming centers—the North, South, East, West and abroad.

A job of supplying with *unfailing regularity* products that in the main are perishable, in the exact qualities and quantities needed, to the smallest out-of-the-way village as well as to complex and congested metropolitan centers.

Only organizations like that of Swift & Company, with its highly-specialized methods of meat-dressing, its hundreds of branch-distributing houses, and its thousands of refrigerator cars, could have handled such a job efficiently and at a minimum of expense in the present war emergency.

Today American meat and meat products are the recognized standard of the world.

And the economy with which these products are produced is indicated by the fact that today the meat of a steer, dressed, is sold for less than the cost of the steer on the hoof! The proceeds of by-products, made out of what once was waste, have made this possible.

The size of the job has dictated the size of America's packing industry. And America's packing industry has proved itself to be equal to its job.

Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders

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STANDARD REMEDY

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Does not blister or remove the hair and horse can be worked. Pleasant to use. $2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free.

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The Market for Home-Canned Products

How a mother-daughter club, by unique display and superiority of its goods, was able to sell at and above the market price

By Margaret B. Sharp

OUR I Kan Kan Klub began with a girl problem. Agnes, my fifteen-year-old daughter, had grown up with Bess Caruthers, the only child of our next-door neighbor. I had always thought the friendship a fine, wholesome one until one of my neighbors on a morning call dropped the remark: "Isn't it too bad about Bess Caruthers? She's grown so boy-crazy and dance-mad I don't know the girl. Morning, noon, and night you can find her dancing at Darker's. If the boys aren't around she one-steps with other girls. I wonder what's the matter with her mother letting her run around so much."

Darker's was the one ice-cream parlor in our little town. Lately Darker had rented an empty room adjoining his shop and installed a piano, thinking—rightly too—that the attraction of dancing would increase the patronage of his place of business. It became known as the "Cabaret," a milk-shake edition of its cigarette-champagne city sister—respectable enough, but harmful in that it attracted the children of high-school age from home work and school studies.

"You'll have to stop going with Bess," I told Agnes. "She spends too much of her time at the Cabaret. People are beginning to talk about her." Agnes said nothing.

That evening I slipped over to Mrs. Caruthers', cutting across the lawn, instead of taking the cinder path. As I came under the dining-room window I heard Mrs. Caruthers say to Bess: "You'll have to stop going with Agnes. Mrs. Blank told me this morning that she was at the Cabaret whenever she could sneak away from home." Bess said nothing.

I went in, and when Bess left the room I began: "Mrs. Caruthers, I heard what you told Bess a few minutes ago—that about breaking with Agnes. Now don't apologize," for she tried to interrupt me. "You needn't, for what you said to Bess I said to Agnes a few hours ago—that she should not go with your daughter. They go together to the Cabaret. I see now why Agnes' grades have been so low. When I thought she was here studying with Bess she was down at Darker's. It's unwise to break up the girls' friendship, and it's foolish to forbid them to go to the Cabaret. We must get them so interested in some work that they'll forget dancing and boys."

Some days later an extension worker from the state agricultural college gave a canning demonstration before our woman's club. In her talk she mentioned the canning clubs, and suggested the formation of a girls' canning club in our community. I took the demonstrator home with me. Mrs. Caruthers and I told her why we wanted a girls' club.

"No you don't. You want a mother-daughter club. Your girls are just at the age when they need their mothers as chums and confidantes. By joining a mother-daughter club you can work with your girls and against them. Each mother competes with her daughter in obtaining prizes for the best canning with the club; a mother and a daughter make up a team which rivals the other mother-daughter teams in the organization, and finally your club is pitted against every other club in the State for state awards.

"If you guard against one thing your club will be successful. Last week I asked one of my girls' canning clubs to become a mother-daughter club. My proposition met with silence. Finally one little girl arose and said, 'We don't want our mothers in the club.'

"'Why?' I asked.

"'If we do have them in they'll do all the canning and we'll do the dishwashing.' If you remember to do your share of the dishwashing, your club will be successful."

We called ourselves the I Kan Kan Klub, a name suggested by one of the girls. Our club started with an enthusiastic membership of fourteen, which later in the season rose to twenty. We canned everything—carrots, onions, greens, beets, cabbage, cucumbers, turnips, peas, beans, strawberries, cherries, raspberries, blackberries, peaches, pears, plums, clam fish, chicken—everything, my husband said, but the steam pipes.

In no time my supply of cans gave out. The season for canning was not yet over. I did not care to buy more jars, yet I wanted to put up some of the later varieties of fruit. Again, I did not want the good results brought about by the club lost by disorganization from lack of work; for the girls no longer made a rendezvous of the ice cream parlors. Picking, preparing, and canning fruits and vegetables left no time for nonsense.

Just about this time our Red Cross gave a bazaar benefit. Each club in town was supposed to take charge of a booth. Our club was asked to aid in the sale of refreshments. We planned to serve coffee and hot gouay duck patties, made from the gouay ducks which the club members dug and canned.

The gouay duck is a delicacy quite unknown in other parts of the country. It is a clam as large as one's hand, with a very long, tender neck. In flavor it resembles a duck.

We sold the patties and a cup of coffee for 35 cents. Upon cashing in at the end of the day I learned that we had made more money than was taken in by any other booth.

Each club in town was supposed to take charge of a booth. Our club was asked to aid in the sale of refreshments

The next day I noticed a big fat, red-faced man eat three patties in succession. After consuming his last he came to me and asked, "What is this gouay duck? I've never heard of it before."

I explained.

"It's good," he said; "mighty good. I'd like to buy some to take home to Montana with me."

"This we used was canned gouay duck put up by members of our club. We might sell you a few quarts."

"All right. How much?"

I remembered the valuation we were supposed to put on fish.

"Oh, forty cents a quart," I answered.

The man leaned over confidentially.

"Madam," he said, "let me tell you something: never sell too cheap." With that he put a five-dollar bill on the table, tucked four jars under his arms, and walked off.

If this man was willing to buy our products, why couldn't we find other people to buy our surplus? But how, when, where, and what to market was a moot question. The day after the bazaar, Mrs. Caruthers, Bess, Agnes and I had a conference to outline a definite program for getting rid of our surplus stock.

"With two cities, a summer resort, and a soldiers' camp within a few hours' ride, we ought to have good markets, if we can make people realize that our product is as good or better than the cannery product. The tourist in moderate circumstances will buy canned goods; so will the people who live in light housekeeping rooms. The well-to-do woman always buys the home product if it is good, and the soldiers in camp will like our jams and jellies." Mrs. Caruthers' reasons for our success sounded convincing.

"Then we'll have to advertise if they are to know that our goods are for sale," Bess replied.

"Precious lot of advertising we can afford," put in Agnes. "I tell you, Mother, we'll have to do something nobody else has done, so people will sit up and notice us."

That idea became the basis of our advertising plan. We staged "stunts," as the girls called them, to attract public attention to our wares. Our advertising schemes were of three varieties: The first consisted of a series of window displays in the shop of a well-known city grocer; the second involved a series of canning demonstrations in various parts of the city for the benefit of the Red Cross (we sold a certain amount of our wares and turned in the proceeds to the Red Cross); our third advertising project called for the best work in canning in the State. We determined to excel so in canning that we would capture first prizes at the state and county fairs.

As I said, we arranged for a series of window displays in the stores of a well-known grocer in a near-by city. We were to furnish window displays for three weeks for the privilege of selling our cans over the counter. We were to pay a two per cent commission on all goods sold.

Our first window display was a canning demonstration. The girls in their pretty white caps and aprons showed how they had canned their foodstuffs. The cold pack, of course, was the method used. One mother supervised each day the sale and demonstration.

We emphasized the cleanliness and purity of our pack, showing by actual operations that dirt or preservative was not found in our output. Many bought out of curiosity at first. They came again to purchase because, as one woman put it, "your jam tastes like real fruit, not like flavored glue." Orders came in by the dozen quarts, and we tried to fill them if possible.

In general, we sold our goods at two per cent above market price. We thought that the home product justified a slightly better price than that put out by commercial canneries. The following will give an idea of the average prices we asked for quart jars or cans: Fruits, 35c; meat, 60c; vegetables, 30c; jelly, 40c; jam, 50c; soups, 40c; pickles, 50c; sea food, 50c; fish, 40c.

Our next window display was the 900-quart pack put up by Mrs. Caruthers and Bess. It made a beautiful window. We followed that up with an exhibit of 232 varieties and combinations of foodstuffs we had canned. It seemed impossible that we could have put up so many kinds of fruits, vegetables, fish, and meats. This exhibit attracted great attention.

Our final exhibit was a "Kan the Kaiser" window. We tried to convey the idea that canned food would play a big part in winning the war by supplying the army abroad and by conserving food at home.

The individual displays took first prize in several fairs. This alone gave our club valued newspaper advertising.

Many visitors to the near-by camp came to our city. We began to put up "His Favorite Fruit"—jars of jams, jellies, and conserves decorated with flag posters, which we placed in paper cartons. These were our most expensive products, for, in addition to cans, sugar, fuel, and hauling, we had to buy individual paper cartons at from five to eight cents. These products we sold at a higher price than those we put in the ordinary market. Canned fruits and jelly went for 30c a pint, jam for 35c, and conserves for 40c. Often we put up a "gift box" of two, four, or six jars of fruit. Most of these orders were for half-pint jars.

For advertising purposes we established a station at the seaside resort. Here our goods were sold in a specialty shop along with knick-knacks of all sorts. We featured the gouay duck and our wild blackberry products because the tourist would be attracted to them as local novelties.

Since certain of our products were in great demand we determined to specialize. We chose the gouay duck because, like the sand dab of California, it is a delicacy peculiar to our region (we always included a printed slip of gouay duck recipes with [CONTINUED ON PAGE 25]

A Progressive Rainbow Shower

By Emily Rose Burt

THE extra hour of daylight at dinner-time suggested to a club of girls who lived in the country a delightful shower for one of their number who was engaged to a soldier in the Rainbow Division.

They called it a Progressive Rainbow, and of course didn't tell the bride-to-be that it was to be a combination automobile ride and shower.

At four o'clock one Saturday afternoon they all met at one of the homes.

The porch was decorated in a red color scheme. A row of red Japanese lanterns hung from the roof all around. Red cushions were scattered about in the chairs and on the steps, and a jar of crimson rambler roses adorned the table.

Everybody sat about and knitted for a little while, and then fruit cocktails, to which strawberries gave the touch of red, were served.

A tray of red ribbon streamers was passed, and each girl pinned one on her blouse, as the beginning of her rainbow badge.

The guest of honor found with her favor a package tied with red tulle, which she was requested not to open till the end of the afternoon.

After this, two automobiles, owned by members of the club or their families, whisked the party along two miles of fresh country road to the home of another girl in the club.

Little tables had been set on the lawn with a bouquet of old-fashioned marigolds in the center of each one, and a toy orange balloon tied to the back of each chair by a long string. Here was served jellied orange soup in cups, and saltines.

The girls received orange-colored favor ribbons to pin next to their red ones, and the bride-to-be received another prize packet, this time tied with orange tulle.

From there they all jumped again into the waiting cars and were transported to the home of a third girl for the third course.

This time it was served in the dining-room, which was decorated with yellow snapdragons. A basket of them filled the center of the table, and at each place was a scalloped shell containing deviled crab meat garnished with lemon quarters and accompanied by tartar sauce. Cubes of hot yellow cornbread were delicious with the crab.

Again the passing of the yellow ribbons to the girls and the presenting of the yellow-tied package to the guest of honor were the signals for leaving to go to the next house.

The automobiles quickly took them there, where the main course of the dinner was to be eaten.

Maidenhair ferns were lovely in a green bowl on the table, and tiny wood ferns were scattered over the white tablecloth.

The menu consisted of broiled chicken, fresh green peas, small boiled potatoes with parsley, and rye rolls.

By this time the girls were getting interested in their rainbow of ribbons, to which the green was now added, and the bride received her fourth package, green-tied.

Motoring to the salad course, the club found the dining-room lighted by blue candles, though the guests were begged not to feel blue. Ragged robins were arranged as a centerpiece, and fluttering blue tissue butterflies marked the places.

The salad was prunes stuffed with peanuts in hearts of lettuce, served with French dressing and Dutch cheese balls.

By the time the sixth stop was reached the sun had set and the moon was coming up, so that the girls sat on the veranda in the moonlight and sipped grape-juice ice to the music of romantic ditties. Lavender streamers were added next to the blue ones, and their badges were complete.

As they finally drove up to the last house they were greeted by a rainbow of tulle which arched the entrance to the porch.

With their fluttering rainbow ribbon badges and the armful of rainbow packages belonging to the bride-to-be, they felt very much at home with the rainbow, and the guest of honor was not even surprised to be asked to seek the pot of gold at the foot.

In the yellow pottery jar which she discovered were as many gold nuggets as there were girls in the club, and each nugget was a little gilt-paper-wrapped gift for the man "over there."

The bride's own gifts were in the packages progressively received, and she had a jolly time opening them under the rainbow.

NOTE: Recipes for any of the dishes mentioned can be obtained by sending a stamped self-addressed envelope to the Entertainment Editor, FARM AND FIRESIDE, Springfield, Ohio.

Child's Yoke

COMPLETE directions for this unusually attractive design will be sent, on receipt of four cents in stamps, by the Fancy-Work Editor, Farm and Fireside, Springfield, Ohio. Order No. FC-107.

Delicious Summer Recipes

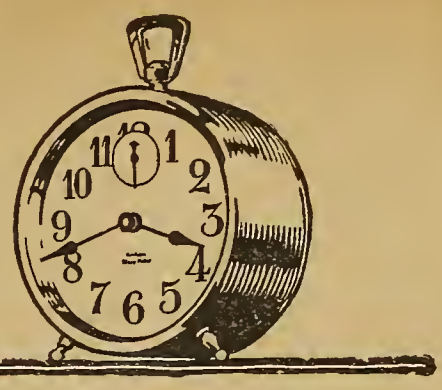
MINT WATERMELON PICKLES—Remove the green skin of watermelon rinds and cut the rinds into small pieces. Sprinkle a little salt over them and let stand overnight. Next day drain off the water, and cook in vinegar for about five minutes; then put in a colander and drain again. To each one and one-fourth cups fresh vinegar add three-fourths cup brown sugar, and let come to a boil. When it boils, swish around in this boiling liquid—by the stems—two dozen sprays of mint. When thoroughly wilted throw these sprays away and add a few spices. Then put in the melon rinds, and let boil two or three minutes before sealing.

MELON FRITTERS—Take a nice melon, cut it into strips, remove the rind and seeds, put the pieces into a bowl, sprinkle with sugar and grated lemon rind, and let them stand for an hour or two. Prepare a batter by mixing the yolk of one egg with two tablespoons flour, add one-half tablespoon olive oil, three tablespoons cold water, and mix until smooth and glossy; add the stiffly beaten whites of two eggs and mix lightly. Dip the pieces of watermelon into it and drop into smoking hot fat and fry a nice golden-brown color, then drain on white paper. Put a napkin on a silver dish, pile high on the napkin, and serve with fine sugar sprinkled over. Serve hot.

GREEN CORN CROQUETTES—One quart sweet corn cut from ears, one cup sifted flour, one cup sweet milk, scant teaspoon butter, two eggs, one teaspoon salt, same of pepper. Mix flour, pepper, salt, warm milk and butter in it, add corn, stir hard. Then stir the eggs, beaten very lightly, the whites last. Make into small balls, and fry in plenty of hot fat. Drain, and serve hot.

CORN OMELET—Beat the yolks of four eggs until thick and lemon-colored, add four tablespoons milk, a few grains of salt and pepper, then put in one-half cup or more of grated corn, left over from green corn boiled, melt a tablespoonful of butter or butter substitute in an omelet pan, turn in the mixture. Cook until set and well risen and browned underneath, then put in the oven to dry on top; fold, and turn on platter.

BUTTERMILK LEMONADE—A delicious variation may be made from buttermilk by the addition of lemon juice and sugar. Use the juice of three lemons to one quart buttermilk, though the quantity of lemon and sugar may be varied to suit the taste. This drink is delightful on a hot day.



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All *Westclox* alarms keep good time. They all have the patented *Westclox* construction — a better method of clock making.

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Western Clock Co.—*makers of Westclox*

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Five sizes for housewives, children, men and women in factories, laundries, restaurants, etc. Water proof, acid proof, grease proof. Won't crack or peel off. Made of vulcanized rubber cloth. Sure, easy sales in every home.

Make $2500 a Year

Work spare time or full time. You will find this to he a sure and big money maker. A prospect in every home. Easy to demonstrate. Often sell five to one family. Miles sold 34 in 14 hrs. Haas sold 60 in 3 days. Edith Remor made over $50 in a little more than a week. Write quick for agency and samples

THOMAS APRON CO.
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GET THIS SUIT

made to your own measure. It won't cost you one single cent. We will give it to you so you can show it to your friends. It will be a big advertisement for us. You can easily make from

$35 to $50 EXTRA Every Week

and besides that be the best dressed man in your town. It's an opportunity you cannot afford to overlook. Even if you only want to order a suit for yourself, don't fail to

Write For Our Big Offer

Don't delay a minute. Drop us a line or send us your name on a post card, and we will send you absolutely free, our wonderful style book, containing dozens of beautiful samples to choose from. Write now.

The Progress Tailoring Co., Dept. 656 Chicago

IF WE SEND YOU THIS BICYCLE

or choice of 44 styles, colors and sizes in the famous Ranger line of bicycles for you to keep and use a month as your own, then agree to show your bicycle to ten or more of your friends and tell them the ridiculously low factory price, easy terms, unusual conditions and exceptional offers I would make, all of which I will explain to you if within ten days of seeing this you will say in a letter or on a postal, "*Send particulars of Bicycle Offer*" and address your postal card or letter:

Would You

Personal for **G. L. LEWIS, Manager**

MEAD CYCLE CO. 88 Mead Block, Chicago

Become a Stenographer

LEARN AT HOME—THE NEW WAY

Many students earn $25 to $40 a week. Speed of 80 to 100 words a minute in typewriting and 125 to 150 words a minute in shorthand guaranteed! Entirely new method. Learn at home in spare time.

Write Today for Amazing Offer

Entire Course on Trial. Complete business training included. Send today for new descriptive book and special offer. Address

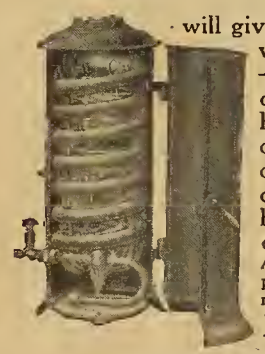
THE TULLOSS SCHOOL, 626S College Hill, Springfield, Ohio

HOT WATER

In Country Homes

Running hot water whenever you need it, as much as you need for kitchen, bath, laundry and cleaning. Simply light the kerosene gas flame and your

SANDS KEROSENE WATER HEATER



will give you all the hot water you want—thirty gallons of hot water in an hour! And at a cost of only a few cents. One gallon of kerosene gives hot water for eight solid hours. Absolutely safe, dependable and permanent. No bother to connect. Low price—write us now.

Guaranteed by

The Augmore Mfg. Co.

5412 Sweeney St., Cleveland, Ohio

Also makers of famous Sands Gas Water Heaters.

Dealers—Write for proposition

Don't Wait to "Swat the Fly"

The housefly is a busy spreader of dangerous diseases, and most housewives "swat" him industriously. The proper method to end the fly nuisance, however, is to stop him before he starts, by keeping the garbage pail and all breeding places sterilized with a solution of

20

MULE TEAM BORAX

Also drives away water bugs and roaches. Wash pantry and closet shelves often and flush all pipes and drains with a solution of 20 Mule Team Borax. It assures hygienic cleanliness. Endorsed and used by leading authorities on sanitation and hygiene.

At All Dealers

Send for "Magic Crystal" Booklet. It describes 100 household uses for 20 Mule Team Borax.

PACIFIC COAST BORAX CO., New York—Chicago

Your Name and Address Printed on 50 Envelopes

We Will Print for You 50 Envelopes Like This ☞ and Send Farm and Fireside One Year for

55c

Thomas Cowie
Route 1, Box 81
Emporia, Kansas

We Will Print 50 Envelopes with Your Name and Address for a Club of Two Yearly Subscriptions to Farm and Fireside

at 25c each

Don't Let Your Letters Go Astray

At this time when thousands of letters are being mailed daily to sailors and soldiers you can insure the delivery of *your* letter to the proper party or its safe return by having your name and address printed plainly in the upper left hand corner of the envelope. This simple expedient would save many thousands of letters annually from the dead letter office.

These are Good Quality, 6½ inch, White Correspondence Envelopes

Your *name, R. D.* or *St. Address* and *Post Office* will be printed neatly in the upper left hand corner as illustrated. *Be sure to write plainly and spell correctly,* for no replacement will be made if the fault is yours.

USE THE COUPON BELOW TO SEND YOUR ORDER

Farm and Fireside
Springfield, Ohio

I enclose $..... for which you are to send me FARM AND FIRESIDE one year and 50 envelopes printed with my name and address, postpaid, as per your offer in August FARM AND FIRESIDE.

Name .....

P. O.....

St. or
R. D.....State.....

Print Below the Name and Address You Want on Your Envelopes

If You Send a Club of Subscriptions Pin This Coupon to Your Letter

Rings Raccoon Disgraced

By F. E. Brimmer

WHEN Old Mike finally succeeded in trapping the cautious Rings Raccoon and discovered that he carried eight rings on his tail, he determined to ship him alive to an agent who purchased animals for zoölogical parks and circuses. He reasoned that Rings was just young enough to tame easily, and the extra black circle about his tail made him an unusual specimen.

On his way home the old trapper passed the Scholes home, and the children, as was their custom, rushed out to view the morning's catch. When the bag was opened they found Rings more dead than alive. The pulling which he had given the steel trap had exhausted his muscles, the wet ground in the swamp had made him cold and inactive, and the swinging ride on the trapper's back had left him dizzy.

So Rings did not object a bit when Margaret, the oldest of the children, gathered him into her warm arms. In fact, he seemed to like it very much, for he snuggled down against her shoulder. The result was that Mr. Scholes was persuaded by the eager children to buy the ball of fur.

Rings was as playful and sportive as a puppy, running, jumping, chasing a ball, and tumbling with the little folks. Then, too, he was as mischievous as a monkey. Indeed, his handlike paws, his habit of skipping about from limb to limb in a treetop, his half-human eye, and boyish pranks would have passed for the antics of the most clever ape.

For his own special home Rings was given a little-used tool box in the garage. This box the children filled with straw and leaves, making a warm bed; but the part of his domicile which Rings liked best was the doorway, for to get in and out of the garage he crawled through the tile drain.

At first Rings was very much afraid of the bright black thing which came purring into the garage. The roaring flourish which Mr. Scholes rung from it when cleaning the cylinders just before shutting off the gas was so startling that Rings poked his head into the straw of his nest.

Curiosity soon got the better of him, however, and Rings found that the automobile would not harm him; moreover, the warm robes in the bottom of the car made a cozy nest.

ONE morning in harvest time Mr. Scholes had to go to town for a part which he had broken on his reaper. He left the car on the main street and went about his business. Just as he was returning the noise of a wild commotion reached his ears.

Boys and men were shouting, dogs were howling, and all were running up the street. Mr. Scholes joined in the chase. Straight up the paved way the mob surged, to stop in a boisterous circle about the Scholes car.

The owner crowded through the throng to find what the trouble was, and got to his car just in time to stop a nimrod from opening the rear door to let a dog clamber in.

"What's this rabble about?" he demanded angrily.

"Dogs run a coon into your auto!" grinned the sportsman.

"They did, eh?" chuckled Mr. Scholes as he realized what had happened. "Well, he's my property then, isn't he?"

"Reckon you're right!" three or four voices promptly replied.

Mr. Scholes was very particular every time he went to town after that to see that Rings was not curled asleep under the robes, but just the same it was many months before people stopped joshing him about the fact that a coon couldn't tell his car from a hollow tree.

This narrow escape from the ugly dogs did not in the least check the mischief that bubbled and overflowed in the heart of Rings. The bright lights and nickel parts of the automobile were most interesting. His handy paws patted and petted the entire surface of the car. The row of four buttons on the dash were most fascinating, and he spent hours when no one was around in investigating the many other bright things. The result being that Mr. Scholes came to the garage one day to find his lights turned on. When this occurred several times he questioned the children, but they knew nothing about it.

The mystery was solved one dark night when the whole household was awakened by the sounding of the automobile horn. "Rar-r-r-r!" it snarled. Mr. Scholes hurriedly dressed and ran to the garage. The lights were blazing brilliantly. "Rar-r-r-r!" rattled the horn. Imagine his surprise when he looked over the side to find Rings squatted beneath the driving post, poking in glee at the switch buttons.

After that the switch box was always locked securely. Still Rings must fuddle all about the car. The tool bag and its contents were often scattered about the floor, any package left in the seats was sure to be pulled to pieces, while the robes and curtains were often dragged out of the car to the dirty cement floor.

Mr. Scholes could not very well hold his patience when one morning he smelled the fumes of gasoline all about the place and discovered that Rings had crawled beneath the car, turned the tiny faucet of the feed pipe, and wasted several gallons of gas. After that Rings had to be carefully watched by the children, and his home was changed to the shed, because the provoked father threatened to send for Old Mike to come and take Rings away if he did another naughty thing.

EVERYONE else liked Rings better for all his mischief. So fond of him was Delia, the cook, that she often allowed him to come into the kitchen, and curl into a round ball behind the range, or to search about for sweets that she had hidden in shoes, behind the clothes hamper, under the woodbox, and a dozen other places.

One day Delia made a juicy prune pudding. It was put on a shelf in the pantry to cool, and forgotten. Rings sniffed at the delicious aroma and then crept into the pantry. In a few moments he was missed, and she found him on the shelf probing about in the pudding just as he had fished for frogs in the mud.

So things went from bad to worse—then worse yet. Rings had a happy home, was well fed, and dearly loved, yet the mischief in his nature brought his terrible disgrace. It came during the time that painters were decorating the living-room of the Scholes home.

Someone left a window raised a few inches, probably to allow the scent of turpentine to get out of the house, and Rings was so fascinated by the odor that he must scramble in to investigate. The turpentine smelled a great deal like the pine and evergreen woods where he had been taught his lessons of caution, only it was stronger and more bewildering. My, how he liked it!

Rings quickly found the pail of paint on a box in the center of the room. Into this he reached and groped about with eager paws, squeezing it out between his fingers. Finally he tipped the pail over and puddled in the paint.

He jumped from the box and peered into the dining-room, where the full moon shone brightly upon the snowy table cloth. Upon this he sprang and danced about with soft grunts of "Whir-r-r! Whir-r-r!" expressing his delight. He found that every step left a track.

Again and again he jumped down to run to the puddle of paint, just as he would have run to a mud hole, and then raced back upon the table once more.

What a sight it was in the morning! Even Margaret could not forgive her little playfellow this time.

Again Rings found himself inside the dirty bag, swinging dizzily from Old Mike's back.

"Jest as I cal'lated," chuckled the old trapper. Then he added, "Guess he'll make a good trick coon for Shuman to sell some circus, all the same."

New Puzzle

Terminal Deletion

The starting point of many an argument behead; curtail—I'm a pipe to music let

Answers to Puzzles

Printed Last Issue

Half-Square

N
Am
Van
Atom
Lends

Numerical

Word, low, I, swoon, Woodrow Wilson

"We are advertised by our loving friends."

Mellin's Food

Elliott C. Smith, Jr., Montrose, La.

Mellin's Food, prepared with milk, is a complete food for an infant. By simply varying the proportions in its preparation it can be adapted to children of all ages.

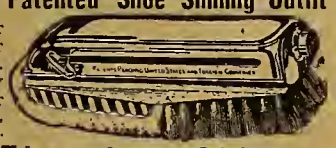
Write today for our helpful book, "The Care and Feeding of Infants," also a Free Trial Bottle of Mellin's Food

Mellin's Food Company
Boston, Mass.

Agents-Something New

Three-in-One Patented Shoe Shining Outfit

A shoe shiner for every member of the family. Saves many dimes. No dirt or muss, no trouble, no soiled hands.



Less Than 1c a Shine

Pays for itself in a wee... sale in every home and office. Hunter made over $30 a wee... Laura King sold 73 in 6 days. Morris writes: Your new brush is a wonder. Sold 12 out of 13 calls. Write for demonstrating sample.

Thomas Brush Co. 4146 Gay St Dayton, Ohio

PARKER'S HAIR BALSAM

A toilet preparation of merit.
Helps to eradicate dandruff.
For Restoring Color and Beauty to Gray or Faded Hair.
50c. and $1.00 at Druggists.

PANTS TO MEASURE

ONLY $2.95

1½ Year's Satisfaction or Money Back

Fine hand tailoring. Choice of many snappy, smart fabrics for dress or business wear. You save one half. Every penny back quick any time you are not well pleased.

NO EXTRAS—WE PAY EXPRESS

No strings to this offer. Not a penny extra for anything. We even prepay all postage and express.

FREE GOLD PLATED PIN

Classy lapel pin free with your first order to show you are a regular agent. Send quick—supply limited.

SEND NO MONEY

Cash Profits

Your friends will buy on sight at our low prices. Our agents get up to $75 a week, cash for spare time. You can do it easy. Write quick for BIG, new sample outfit to choose from, and our astonishing offer FREE. Do it NOW.

CHICAGO TAILORS ASSOCIATION
Dept. B-405, 515 So. Franklin St., CHICAGO

Good-Health Talks

Suggested by Questions from Our Readers

By DAVID E. SPAHR, M. D.

SUMMER heat is always depressing and enervating, and if we would retain our vitality and vigor during this period we should observe the following simple but infallible rules, always remembering that extreme heat lessens our resistance to disease, and renders us peculiarly liable to digestive and intestinal diseases that are so prevalent during hot weather.

In order that our sleep and rest can be secured, our sleeping apartment must be well ventilated and our covering light and loose.

Our clothing should be simple and light—of as open texture as possible, to admit the free access of air to the pores of our skin; not heavy and burdensome.

We should avoid overeating, overworking, and worrying. We should avoid overloading the stomach with rich foods and ice water, as this tends toward indigestion and dysentery.

We should avoid drinking ice water with meals, as it delays digestion.

We should eat sparingly and slowly and less at a time, and oftener, if necessary to maintain strength.

We should avoid eating overripe, unripe, or green fruits. And, above all, take a cold bath every day, or at least two or three times a week.

Ringworm

Please give a remedy for ringworm.
T. F. B., New Jersey.

THERE are many varieties of ringworm, and the treatment must be that suitable to the variety.

You may paint the patches with tincture of iodine or glacial acetic acid every other day.

Tongue-Tie

Can physicians correct tongue-tie by an operation? C. O. B., Maryland.

YES, by a simple operation. To do this a surgeon or physician puts the tongue on the stretch by inserting two fingers into the mouth under the tongue, and cuts the tendon with a blunt scissors, in a direction downward and backward to avoid the ranine artery, which lies in the fold of the frenum running up along the base of the tongue. This should only be done by a physician or surgeon.

Dandruff

I have dandruff in my hair. Will you please recommend a remedy?
Mrs. O. E. S., Georgia.

TRY a solution of chloral hydrate, five grains to the ounce of water. This will clear the hair of dandruff and prevent the hair from falling out. Arnica oil is also a hair stimulant.

Sour Stomach

I am greatly troubled with sour stomach. What medicine would you recommend for this? W. F. Y., Nebraska.

A TEASPOONFUL of milk of magnesia before meals, and discontinue the use of coffee.

Hot or Cold Applications

Which is best to apply to sprains—hot-water bottle or an ice bag? Is arnica good?
F. D. E., Oregon.

HOT vinegar applied by means of cloths, to soothe and relax, until the doctor arrives and applies adhesive straps to give the muscles rest and support, is best. Arnica is used to remove soreness, and is sometimes quite effectual.

Walks in Sleep

ONE of my patients came in very much distressed the other day. She told me that her son, aged ten, walks in his sleep, and she wondered what could be the cause of it.

I advised her to see that he does not eat too heartily, or too late a supper; to look after his teeth and tonsils to make sure that they are not a source of irritation; to ventilate his room well at night, and place only light coverings on his bed; to insure free elimination from the kidneys and bowels by giving plenty of laxatives. This of itself is often sufficient to effect a cure.

This boy's trouble should not be made light of, for it may be symptoms of an oncoming nervous trouble. I told her that if his trouble did not yield after free and continued elimination and careful attention to the simple rules of sanitary science she should begin a course of medical treatment.

Constipation in Infants

What can I do for my little baby—she is so constipated? Mrs. K. F., Iowa.

TRY a teaspoonful of orange juice or olive oil, once daily. If the child is three months old, prune or fig juice may be given. If much older, the dose may be doubled.

Sunstroke

What is the treatment for sunstroke?
G. H. J., Texas.

ICE-COLD applications to the head and heat applied to the extremities, if heat exhaustion. Call a physician at once.

Weak Heart

I am forty-four years old. I had diphtheria, which left me with a ruptured heart valve. When I begin to eat my heart misses beats. I try to be careful of my diet, but sometimes eat too much. I drink lots of milk. Mrs. A. B. R., Kansas.

YOU must be more careful and regular in your eating. Take one or two lapactic pills at night, and one one-sixtieth grain of strychnia sulphate after meals. Do not overwork or worry.

Sty

What is the treatment for sties?
G. W. R., New Mexico.

HOT applications and a thorough evacuation of the contents. If an incised and evacuated chalazion fills up again, its radical removal is recommended. It would be best to consult a physician.

The Market for Home-Canned Products

[CONTINUED FROM PAGE 22]

each can); the Kentucky Wonder bean because it is a large, tender, readily grown bean; and the wild blackberry, one of the most delicious fruits in our section.

After we began to market our goods it became necessary to hire outside help to obtain fruits, or else to admit young brothers in our concern. The girls chose to elect the little brothers as co-workers; the boys, on the other hand, were delighted to belong to a money-making company.

For we did make money. We sold a little over 3,000 quarts, and could easily have sold more. One-half—or a little more than one-half—of our proceeds was profit. Part of this has been put in a reserve fund; the other part has been divided up among club members in proportion to the number of quarts they put on the market.

Our first year in marketing our canned goods taught us three things: To advertise by unique display, to specialize in products which had the dual advantages of popular demand and cheapness of pack, and, last and most important of all, to sell at or above the market price. Never ask less than the market price for the superior home pack.

Yes, our club paid in more ways than one. It gave our girls work in which they were interested; it gave them business training; and, best of all, it formed a common bond which has drawn our mothers and daughters together.

Superior Soles

The use of Neōlin Soles is not limited to any kind of shoe. They add comfort, durability, waterproofness to all kinds of shoes—for everybody.

Neōlin

Trade Mark Reg. U. S. Pat. Off.

Soles

Created by Science—to be what soles ought to be. They come on new shoes of all styles for men, women and children, and are available everywhere for re-soling and half-soling. Always marked: Neōlin

See displays in shop windows

The Goodyear Tire & Rubber Co.
Akron, Ohio

One of the many fine values in Durable-DURHAM Hosiery

MISS NANCY

A light weight gauze lisle finish stocking with an extra fine silk finish. It has wide, elastic top, double sole and high spliced heel. Black and white.

Price 35c pair

"Smooth, seamless and even"—that means comfort

There are no seams in the feet of Durable-DURHAM Hosiery; no roughnesses of any kind. Heels, soles and toes are smooth and even and very carefully finished. That is one reason for the downright comfort in every pair of

DURABLE DURHAM-HOSIERY

FOR MEN, WOMEN AND CHILDREN

Made Strongest Where the Wear is Hardest

This hosiery is long-wearing and economical. Every pair is **strongly** reinforced at points of hardest wear. Legs are full length; tops are wide and elastic; sizes correctly marked; colors will not fade nor wash out.

There are Durable-DURHAM styles for work, dress or play, for every season of the year. Ask to see them at your dealers. Look for the Durable-DURHAM ticket attached to each pair.

Write to Sales Dept., 88 Leonard St., New York City, for free catalog showing all styles.

DURHAM HOSIERY MILLS, Durham, N. C.

He Makes $75.00 Each Week Is He Brighter Than You?

The story of Walter Kaley, the young man whose picture appears below, reads like a fairy tale. Just a short time ago, he was working for small wages in a machine shop. Now, he draws $75.00 each week as our special Pennsylvania representative.

Mr. Kaley is just like thousands of other young men. He had drifted into a groove and was making no progress. We persuaded him to join our agents' staff and from the beginning he showed an unusual aptitude for the work.

You Can Duplicate Mr. Kaley's Success

No special talent or training is necessary, just confidence and belief in yourself and a determination to grow; to get ahead; to be somebody. There is no royal road to success. It travels the rough, narrow path of hard knocks over obstacle mountain. But you *can* attain it. We'll help you, as we helped Walter Kaley and dozens of other young hustlers.

We have men and women working for us on both a commission and a salary basis. We can use all your time or only part. Thus you need not give up your regular work unless you are convinced that the opportunity we offer you gives promise of bigger and brighter prospects for the future.

Your Opportunity Coupon

Get a pair of scissors and clip the coupon. Fill in your name and address and mail it to-day. We will send you full information by return mail. Address

Agents' Division
Farm and Fireside
Springfield, Ohio

COUPON

FARM AND FIRESIDE, Agents' Division
Springfield, Ohio

Dear Sirs:

Please give me the details of your extraordinary proposition to agents.

Name.....

Street or R. F. D.....

Town..... State.....

Dulcie Decrees

[CONTINUED FROM PAGE 7]

told herself, "and I'm fond of him, but—" she threw out her hands suddenly in fierce self-abasement. "Don't be a fool!" she counseled herself savagely. "There's no come-back, and you know it."

"But think of Letty," whispered her tempter. "The world owes her a chance. They'd come round after it was over; and see what it would do for her."

But she clapped her lips tightly together, and shook her dark little head emphatically.

After an unusually warm day the evening was delightfully clear and mild. Dulcie got into the boat with a rebellious aversion to carrying out her stern resolve of the afternoon.

Young Whitlaw had overestimated his prowess with the oars. He was slow and awkward; and Dulcie saw with uneasiness that he was reckless as well.

"Keep to the middle," she urged as he lunged sidewise toward the deeper shade near the bank. We might go aground."

He laughed unpleasantly.

"Don't worry. I'm going to rest here a while. This hole is deep, deep."

A CHILL crept up Dulcie's spine. Had he been drinking? But no, it couldn't be that. He was not that sort. She mustn't let him see she was uneasy; so she began to talk, inconsequential chatter, merely to shatter the oppressive silence.

"I wrote to Dad to-day," he said without answering or heeding her.

"Yes?" she questioned vaguely.

He gave a short laugh.

"I gave him something to think about."

He leaned toward her, articulating slowly, as if she were hard of hearing.

"I told him that he needn't worry about Dora any longer; that I was going to marry *you*."

"You did?" Dulcie stared unblinkingly, trying to pierce the darkness and read the face of this unknown quantity confronting her. He was no longer the boy she had set herself to console and cajole. There was something beyond her grasp, a new note in his voice that might mean almost anything.

"I did," he returned succinctly.

"But you had no right. You—"

"I merely anticipated, little one. You'll give me the right to-night."

"And if I don't?" She flung it out lightly, but her voice shook in spite of the desperate hold she kept upon herself.

He rocked the boat ever so lightly, and she felt without actually seeing that he was measuring the pool with a speculative, determined eye. He said nothing.

"What if I don't?" she insisted, her voice rising shrilly.

"You made me love you," he returned coldly. "You did it deliberately. You shall not go back till you promise."

There was silence for hours and hours it seemed to Dulcie. The boy was mad and she was responsible. Should she promise, and then break her word afterward? Her whole nature revolted at the shabby trick. But wouldn't she be justified? The boy was mad—mad as a March hare.

And yet—there was truth in his assertion, a crude justice in his determination. His pride was stung. To be jilted by a girl who was his social inferior, and trifled with by one who sold cigars at a hotel counter—she saw his point of view, the hurt protest of a lusty vanity.

A tender little smile curved her lips, her tense muscles relaxed. After all, he was only a big sulky boy, while she—she was a thousand years old in worldly wisdom.

She laughed softly.

"Picture the riot!" she said. "Did you tell him I was clerking in a hotel? That my job was to whistle quarters out of the small-change pockets of my unsuspecting victims?"

"All of that," acknowledged Whitlaw. "In fact, I rubbed it in that my taste wasn't improving with age. I gave him a jolt, all right."

Dulcie gave a queer little laugh that caught in her throat.

"You hand them out hot off the griddle," she observed dryly.

"Oh, I didn't mean—you know—don't catch a fellow up like that, Dulcie! I was just throwing it in to Father." She had him where she wanted him now, and quick to seize her advantage she took the conversational helm and kept it.

When Norval tried to get back his advantage and extract a promise of marriage from her he had to content himself with her assurance that she'd marry him some day if he insisted, but it wasn't to be an engagement yet.

That night before she slept she formulated the plan of her campaign, relying on the boy's letter home to assist her to gain her end. While they were strolling down the beach the next afternoon she received her cue. Norval touched her on the arm.

"There she is—over there by the bandstand. See? She has a blue parasol—the girl with the white hat. That fat woman is her mother."

[CONCLUDED IN SEPTEMBER NUMBER]

Will Your House be Warm—Next Winter?

[CONTINUED FROM PAGE 4]

right in the midst of woodlands, the fu authorities announce.

Each year nearly 100,000,000 cords of firewood are consumed. Official estimates place the wood used on farms during the year 1917 at 82,777,000 cords, valued at $225,426,000. In order to increase the wood for fuel and to make sure of intelligent clearing, rather than tree butchery, the National Forest Service has assigned men to assist in the campaign for increased wood production. If only such trees as are ready to go are removed, and if others are kept coming on, there will be no timber lost; rather is it possible, through this program, to increase the supply.

According to Paul D. Kneeland, assistant forester of Massachusetts, wood has at least five points of advantage over coal: 1. It is less wasteful. It burns up completely and doesn't burn when not needed. 2. It is cleaner. There are few ashes and less dirt and gas. There are no cinders to sift. 3. Wood makes a quicker fire, being next to gas in this respect. 4. It is often more convenient. To take the chill and dampness off the house when little heat is needed, a wood fire can be kindled and does its work in a few minutes. 5. In many sections wood is cheaper than coal. In some places waste wood is readily available free, and innumerable farmers have wood on their own ground.

While the summer consumption of fuel on farms is small, it is possible to make a saving. On many farms, even where there is plenty of timber, the use of coal has come to be the custom. The cut cordwood campaign is to help "lick" the Kaiser.

Saving the Wheat Situation

[CONTINUED FROM PAGE 12]

pretense of being "rejected" and "no-grade" wheat. The farmers were helpless before such a situation. They knew they had sold No. 1 and No. 2 Northern to the local elevators, but they were forced to accept the grading of the terminal elevators and to be paid according to this grading.

Dockage was another practice by which they suffered, and rebelled. There is a dockage valuation of $30 to $35 on every 1,000 bushels of wheat. Dr. E. L. Ladd, president of the North Dakota Agricultural College, places the dockage loss to the farmers of his State at $2,394,000 annually, on the basis of 100,000,000 bushels.

But this does not complete the story. In 1912, the farmers paid $68,200 more for switching cars of grain in Minneapolis than the railroads ever received. They were obliged to pay $1.50 switching charges to the elevator men on every car, regardless of whether it was switched any or not. This abuse finally became so flagrant that the Minnesota State Railroad Commission put a stop to it. It has been estimated that in years of large harvests the wheat farmers of North and South Dakota and Minnesota have been obliged to pay as much as $3,000,000 a year to have their grain offered for sale, in addition to all elevator expenses. The "sales" were sometimes merely paper transactions between the same parties under different names, but the fee was demanded just the same.

Then the whole sorry mess got into politics, and that was the beginning of the end. The worm turned.

How Do YOU Pronounce—Amiens?

And what about Bailleul; Bruges; Chateau-Thierry; Dniester; Hazelbrouck; Oise; Montdidier; Neuve Chapelle; Noyen; Piave; Sanbre; Somme; Soissons; Vosges; Woevre; Yser?

EVERY day the newspapers are filled with words and names strange to American tongues. We stumble over them and skip them altogether, but feel guilty in doing so; for these words and names deal with the things our boys are doing "over there" in France, Belgium and Italy. We ought to be able to pronounce them correctly, for many of them will live forever, in the history of the greatest war of all time. They will be indelibly written in the blood of American soldiers and sailors.

REALIZING the great need for an accurate and simplified guide to the pronunciation of war names, we have had compiled by *C. O. Sylvester Mawson, Litt. D., Ph. D.*, a list of over 2,000 French, German, Hungarian, Italian, Polish and Russian War names. This list includes names of persons, towns, rivers, fortresses, etc., which have appeared or are likely to appear in the war dispatches. The clearly explained keys and accentuation marks make the pronunciation of these difficult words easy, even for the person of limited education.

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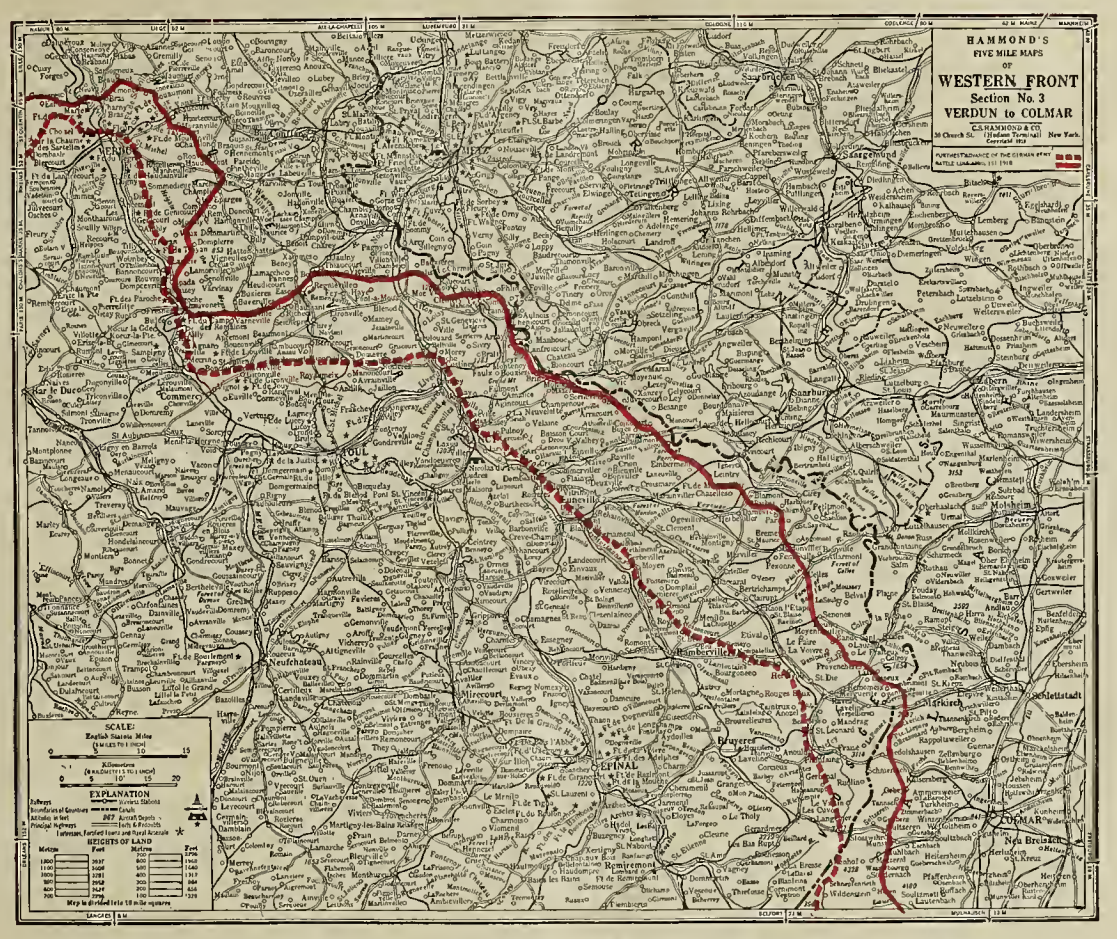

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Drawn by Clarence F. Underwood

Balloon Strafing—By Sergeant-Pilot Lamb

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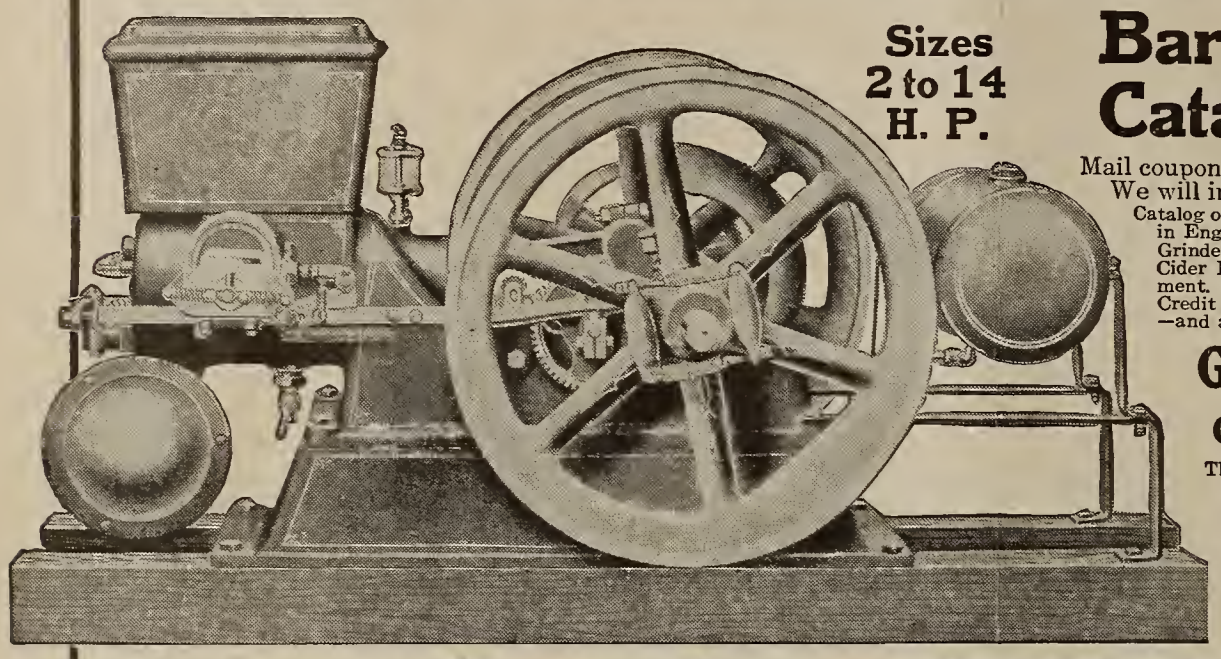

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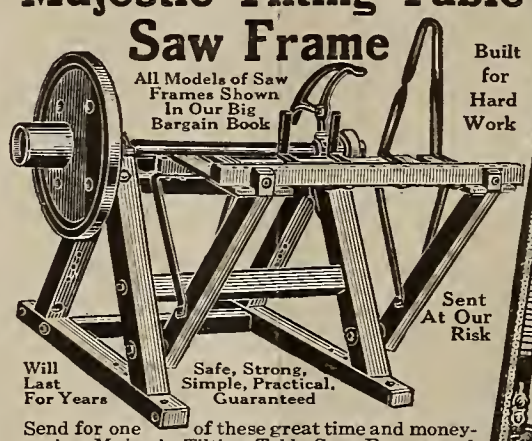

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A New French Town

The geography class was called up for their recitation, and the subject of their lesson for the day was France.

The teacher started off with this question:

"Who, in this present terrible war, is one of our main allies?"

"France," came the answer from a chorus of voices.

"Quite right," said the teacher, beaming. "Now, can any of you give the name of a town in France?"

A small boy at the back of the class almost fell over in his eagerness to tell.

"Somewhere," he shouted breathlessly.

All the Same

"The shower of soot and ashes from Vesuvius must be an awe-inspiring sight," said the sweet young thing, who was single and very romantic. "Wouldn't you just love to witness it?"

"Oh, I don't know," answered her neighbor, who was married and very matter-of-fact. "I've seen my husband take down a stovepipe."

He Had the Evidence

TEACHER: "Tommy, do you know 'How doth the little busy bee'?"

TOMMY: "No, ma'am; I only know he doth it."

When Twain Wanted an Island

Here is a story told of Mark Twain, who often went on long cruises and was very much at home on the water.

One one cruise he was caught in a heavy gale. The storm continued for some time and was quite violent. Mark was much upset by the rolling and pitching of the ship. He leaned over the rail with a desperate expression.

"Mr. Clemens, can't I get you something?" asked the steward.

"Yes," drawled Mark. "Get me a small island."

Couldn't Fool Dad

"Edith," said her father, "how often do you practice on the piano when I'm away?"

"Why, every day, Dad."

"And to-day?"

"About the same as usual."

"Well, my child, I'm glad to hear you are so regular. The next time you practice, however, be sure to unlock the piano. I locked it last week and have been carrying the key in my pocket ever since. Here it is."

Can't Trust 'Em

A burying party had completed its job and the leader returned to report to his commander.

"Did you bury all the dead as I ordered this morning?" asked the captain.

"Yes, sir," answered the sergeant, "but we had a little trouble with one of them."

"How was that?"

"Why one of them raised up on his elbow and said he wasn't dead; but he was one of those darned Germans, and you never can believe anything they say, so we buried him anyway."

Wore Rubber Soles

OLD LADY (to wounded Yank): "How did it happen?"

"Shell, ma'am."

"Did it explode?"

"Well, I'd hardly say that. It just crept quietly up behind and—bit me."

For the Bird

Johnny, aged four, went into a near-by grocery and asked for a box of canary seed.

"Is it for your mother, Johnny?" asked the grocer.

"No, of course not," replied the little fellow. "It's for the bird."

An Advantage

"This house suits me in many ways," said the prospective tenant, "but there is one thing I don't like. There seems to be no protection from the wind."

"That's just the beauty of it," replied the agent. "Whenever there is a blizzard, all the snow drifts over to your neighbors, and you have no walks to shovel."

He Was Carried Out

EMPLOYER (to boy): "If a customer comes and wants to look at a piano, flute, or mandolin while I'm at lunch, do you know what to show him."

BOY: "Yes, sir."

EMPLOYER: "And if a customer should want to see a lyre—"

BOY (interrupting): "I'll send for you at once, sir."

Geraldine's Cup

"Wait a minute and I'll get you another cup. That's Geraldine's cup," the boy told the thirsty motorist.

"Oh, that's all right," said the gay young man, after he had finished drinking. "I'm proud to drink from Geraldine's cup. She's your sister, isn't she?"

"No," replied the boy. "She's our dog."

U and U Boats

If U fast U beat U boats
If U feast U boats beat U.
—*English Placard.*

Just Jabs

When a horse gets hot under the collar, he can't help it; but a man can.

The mechanical brooder makes the chicks grow, and is mighty useful; the human brooder makes the troubles grow, and is good for nothing.

Grandpa says that judging from what he saw on his last visit to town the high price of pork hasn't eliminated the end-seat hog.

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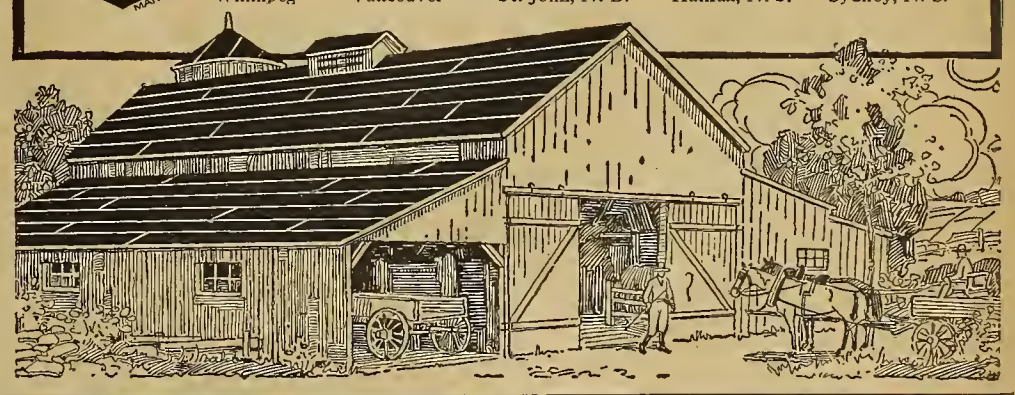

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Published Monthly by
The Crowell Publishing Company
George D. Buckley, *President*
Lee W. Maxwell, *First Vice President*
Thomas H. Beck, *Second Vice President*
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L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Harry M. Ziegler, *Managing Editor*
B. F. W. Thorpe, H. H. Haynes, Helen L. Crawford, *Associate Editors*
Alden Peirson, *Art Editor*

Editorial and Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at Post Office at Springfield, Ohio, as second-class matter, under Act of March 3, 1879.

By subscription, 25 cents a year; three years, 60 cents; or five years, $1.00. Single copies, 5 cents.

Volume 42 SEPTEMBER, 1918 Number 9

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Balloon Strafing

The experiences of two allied airmen diving through three vicious barrages, destroying a huge balloon, and returning home hotly pursued by three Hun planes

By Sergeant-Pilot Dean Lamb

FROM the choppy channel to mountainous Switzerland there winds and twists the serpentine swath of No Man's Land. Looking down on it from a height of several thousand feet an airman sees it clearly defined here, and lost in a maze of tape-like trenches and shell craters there.

A double line of observation balloons, the enemy's and ours, are tethered from one to three miles back of the front-line trenches on both sides of No Man's Land throughout the several hundred miles of the western front. There they swing and sway in the breezes.

These balloons are known by many names among the men of the different armies, but their fundamental purpose is the same. Observation of the enemy's first, second, and third line trenches is the hazardous task of the men stationed in these balloons. Sometimes the big bags go up in swarms a mile or two apart, while in less important sectors the balloons are seen only as tiny black specks.

In size and shape these observation balloons are quite similar in all armies, but their names are varied and picturesque. The French call them *saucisse*. We of the Royal Flying Corps dub them *Drachens*, and the boys of the Royal Naval Air Service give them the name of "Blimps." Hung from the gas bag are usually one or two wicker baskets, in which the observers do their observing, plotting, charting, and telephoning. Each has direct telephone connection with certain batteries and the aërodromes of their sector.

In the newer type balloons the wicker basket has given place to a steel car, which is equipped much like the wireless or radio room of a ship. Here one observer keeps his eye at the end of a high-powered telescope while the other watches for enemy planes.

Usually they are notified when an enemy airman is anywhere in their territory, and if the situation looks critical the bag is hauled down as fast as winch and cable will drag it. But in fair weather the observers are expected to stick to the job, protected by a number of anti-aircraft guns, or "archies," and in some cases by flying machines, far overhead.

Observer Must be Parachute Jumper

A BALLOON observer must have good "sea-legs," as the movement of the bag, in even a light breeze, is often upsetting. He must also be a good parachute jumper, because upon the approach of an enemy plane the observers are expected to hop out of their baskets with their instruments—such as they can get away with—and descend *à la* parachute. Usually this opens out in time to permit of their going up another day.

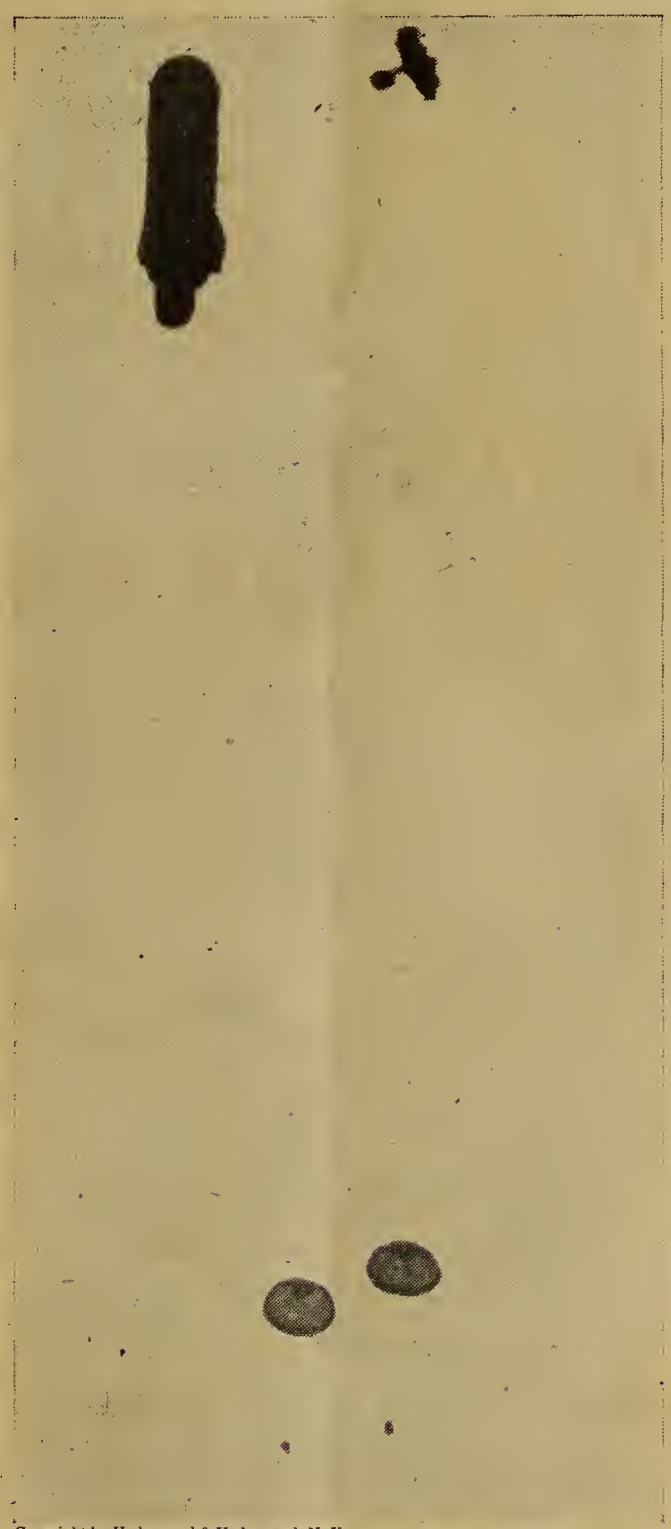
Each side attempts sudden attacks on observation balloons. Sometimes the artillery tries to bag them with long-range guns, and the Germans have been trying incendiary and gas shells with that object in view, but the surest and most-used method is to send up a plane or two and *strafe* them.

Sometimes rockets are used. Again, explosive bullets are fired out of the machine gun forward, and sometimes steel darts or incendiary bombs are dropped. The French have been using a sort of rocket that bursts and lets out other rockets which also burst, one after the other, until one has caught in the meshes of the bag net and set fire to the "skin." The Hun has tried many tricks, but he depends mostly upon the explosive bullet.

Very frequently the balloons are anchored to a winch fastened to a huge motor truck. Instead of the truck being located in a field, close to the balloon hangar, it is placed on a clear road where there are few trees. Thus when Mr. Hun attacks he finds that the balloon is not only coming down, but is also traveling away from him, dragged by the truck, which moves along as the winch works. Under these conditions it is doubly nerve rending to continue after the bag, especially if the observer has dived out early in the attack and the down-haul was begun before the birdman made his drop for it.

For a long time our squadron commanders had been getting reports of a most unfavorable nature concerning a big Hun "sausage" located just behind Arras on the river Scarpe. After heavy German guns had played merry hades with several of our batteries, it was put up to our squadron commanders pretty straight that they'd have to get busy and do something.

For months the various squadrons had been talking about bombing balloons. A few 20-pound bombs had been tried out on several scattered targets, but with little success. It seemed as though the machine dropping the high explosive bombs never made a hit except on the landscape, where they did nothing but dig holes. Even had these big bombs hit the *Drachen* they would have passed through the envelope without exploding.



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Two allied observers escaping in parachutes from a balloon just before a Hun airman shot incendiary bullets into the gas bag

The Hun airplanes were keeping well behind their own lines as far as observation work was concerned. They had the usual gangs of single-seaters out, and occasionally they worked in other sectors; but they seemed perfectly satisfied with the observation results secured through this one big balloon. Our own commanders were far from satisfied.

The Huns had protected their big bag with an unusually large number of anti-aircraft guns. Arras was always a wicked place for archies, but they seemed disposed to guard this particular observation point at all costs. Five of our machines had been brought down by the barrage that was put up about the balloon, and every attempt we had made to get it by dropping steel darts had failed. So slim were the chances of a plane getting close enough to this Hun balloon to destroy it that our commanders would not order another machine up to get it.

Get Orders to Destroy Hun Balloon

"THAT Hun balloon must be brought down," came the order from brigade headquarters several days later. All the pilots and observers in our squadron were asked for suggestions. Idea after idea was offered and discarded, until somebody proposed using incendiary bombs.

The reason we had not made more use of incendiary bombs was that they were so light the wind would often drive them as far as a mile from the target. Hence they were useless unless a direct hit was made on a very inflammable mark. After a lot of discussion it was decided that these bombs seemed to be the only thing that would do any damage if we could make a direct hit. So it was decided that one more machine should make the attempt.

Our bombs were little red affairs about eight inches long and four inches in diameter. They had to be dropped through a tube because they were ignited electrically as they passed out of the bottom end.

One glaring difficulty was to carry enough bombs to make sure of results in case the machine did manage to pass the anti-aircraft barrage. The pilot could carry only five or six bombs on the seat with him, and he could not reach into the front seat. The only solution seemed to be for the passenger to carry the bombs in the front seat and pass them back to the pilot as needed.

In order to carry the requisite number of bombs and a passenger, the machine would be so overloaded that the machine gun would have to be left behind. This meant that in the case of an attack by hostile aircraft the machine would be helpless and would have to depend for safety entirely upon the wit and nerve of the pilot.

The case looked pretty hopeless—so hopeless that the squadron commander called for two volunteers to do the job. The entire squadron volunteered as a man. As the simplest way out the commander took a pack of cards, making the decision that whoever drew the ace of spades should be the pilot, and the ace of hearts should be the passenger. The cards were dealt, one at a time, face upward, in front of the men. It seemed to me, keyed up as I was, to be the slowest, most deliberate and quiet game I ever attended. As I look back on it now it seems like a page out of a novel thriller or a scene at a movie. But it was dreadfully real to all of us then. Not a sound but the audible breathing of the men and the slow deliberate f-l-i-c-k of the cards.

A quick intake of breath made me glance down the line. A man was holding the ten of diamonds and next to him stood Lieutenant B. with a broad grin on his boyish face. He held the ace of spades in his hand. He was nothing but a 19-year old kid who looked to be sixteen. B. was a fine fellow, an intrepid aviator, without fear or nerves. From his face I could see that the whole affair appealed to him in the light of a great adventure.

"Who's going to be the other lucky 'blighter'?" he inquired, searching the circle with his smiling face.

I might have known the ace of hearts would fall to me. "You ought to be devilish lucky in love," one of the fellows said by way of rubbing it in.

"Good boy," said another. "Lucky beggar," said the third, which sounded very much like having an undertaker inquiring after your health. [CONTINUED ON PAGE 12]

When Our Quarters Fight

All of us cannot battle the Hun at the front for our freedom and the safety of our homes, but we can back our fighters with our savings

By Carlton Fisher

EVEN when the cloud of a German success casts a shadow on the hopes of the Allies, I am cheered by this thought: The submarine, the airplane, the telephone, barbed wire—in fact, nearly all the things the Germans use so well in war—were American inventions. And because this is an economic war, and because it gives every American a chance to use the brains which democracy has helped develop, we are going to win. It may take a long time for superior brain power to overbalance German military experience and long preparation, but the result is just as certain as man's dominion over the brute strength of the animal world.

Take a simple example: In Germany the Government limits the people in the amount of clothing, fats, food, and many other commodities which they are permitted to buy. Boys and girls under twenty years old are required to bank their weekly earnings in excess of 4½ marks. This amount, equivalent to about $1.15 of our money, the child may spend, but the German Government takes the remainder which he has banked and gives him a bond for it.

The method is one of compulsory saving in which the Government absolutely dominates the individual and leaves no opportunity for any response except obedience. Now for the contrast: Out in Basin, Wyoming, the local war-saving society—a voluntary organization—decided to help the United States Government finance the war. It decided to give a dance, probably the first of its kind in the country, although the new dances do not ordinarily originate in the West. But this one did. It was a thrift-stamp dance. The hall and music were donated and every couple that went on the floor bought a thrift stamp. Or take another example:

The South Dakota State Fair Board has announced that it will pay all premiums of $5 and under in war savings and thrift stamps this year. The total expended in this manner will amount to about $15,000. Here is still another way to help Uncle Sam, a way which if generally adopted will make the stork as much a national bird as the eagle or the busy American hen: A druggist in a small town in Alabama has agreed to give a thrift stamp to every baby born in the county this year. Which general method will result in the greatest loyalty to the Government and in final victory—the compulsory German system in which the worker does what he is told and asks no questions, or the American way in which Uncle Sam first points out the grim necessity for saving and then leaves the way clear for real American ingenuity?

The war savings stamp plan is in itself the sort of device that appeals to the mind of American people. It is ingenious, yet easy to understand. It has a direct individual appeal, yet is universal in its effect. It is a plan which recognizes that the vast majority of our people must remain patiently at home, yet at the same time it enables everyone, from the new-born babe to its proud grandmother, to help carry the Stars and Stripes to Berlin.

A few days ago I asked Herbert Quick of the Federal Farm Loan Board what he had to say to FARM AND FIRESIDE readers about war savings and thrift stamps. Mr. Quick has for many years championed the belief that the Government could do a great deal more for farmers than it has done, and he is now one of the best friends of American farmers in official Washington.

"Tell the FARM AND FIRESIDE folks," said Mr. Quick, "that no more patriotic act can be done by a farmer or farm household than to provide the family with war savings stamp and thrift stamp folders, and make them the repository for the savings of the family. Everyone who can should buy bonds, but the stamps are convenient for those of small or moderate means. It is the way to teach both patriotism and thrift. It is the way to fight the tyrannical force we thought we had escaped from, but which purposes through submarine warfare to make us slaves by murdering the people who take our products to market.

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A section of our Quartermaster's Corps, passing through a French village, as it rushes supplies to the front. Fifty war savings certificates will pay for a motor truck

"Farmers should form their own organizations for the sale of Liberty bonds, war savings stamps, and thrift stamps. The United States Treasury needs the money. If the Treasury fails, we lose the war. The boys in the trenches will not be fed. If the Treasury fails, the Allies will fail. The United States Treasury is the principal agent for financing the whole war. We must buy these stamps to protect the lives of the men at the front. The soldiers in the trenches are doing magnificent work. Every one of them is a hero. He subjects his life to explosive shells, poisonous gas, and the barbarities of the enemy.

"We cannot all be that sort of hero, but everyone should see that the Treasury gets the money. The United States does not ask us to give it, although if we were asked to give it outright we ought to do so. But it doesn't ask that. It asks only that we loan the money, which the Government will repay with interest."

William G. McAdoo, Secretary of the Treasury, and Frank A. Vanderlip, chairman of the National War Savings Committee

The Treasury Department has issued an eight-page pamphlet explaining the plan in detail. Copies may be had at post-offices, banks, or other authorized agencies, or by addressing the National War Savings Committee, Washington, D. C.

In asking for the support of the people in raising two billion dollars in this manner, the Government has encouraged the formation of war saving societies. The chief object is to secure organized effort toward saving, but such societies also provide an opportunity for a discussion of the war, the chief business in which this country is now engaged. Philadelphia, the center of Quaker piety, has upward of a dozen war saving societies, one of which has adopted the unique name of Helmet the Kaiser W. S. S.

Ceredo, West Virginia, has worked the letters W. S. S. into the name We'll Sustain Sammies W. S. S. Loyal Alaska reports that war saving societies are flourishing there. The Arctic Brotherhood War Saving Society of Seward, Alaska, purchased $4,380 worth of war savings and thrift stamps in January. From practical Iowa comes an effective plan of regular and systematic saving in the form of a Post-office Box War Saving Society.

Each member keeps a thrift card in his post-office box, and every time he gets his mail his thrift card is also delivered to him. This is a reminder to purchase a thrift stamp, affix it to the card, and return it to the post-office box. But, in order for any or all of these plans to yield greatest benefits, it is essential that we understand the underlying principle of saving to finance a war. Money as such will not win a great struggle such as we are engaged in.

Many a wealthy nation has crumbled before a poorer but more vigorous foe. A successful war demands as its chief requirements the products of human labor. Modern warfare is about 75 per cent industrial effort, and it is hard to say where peace industries stop and war industries begin. Farming is of course one of the most important war industries. Even the solitary sheep herder of the plains, with his bleating flock, is performing a valuable war service in the production of wool for clothing and mutton for food.

But certain industries which exist for the manufacture of luxuries, or which cater to the whims and weaknesses of our population and contribute nothing toward winning the war, must not be allowed to continue. They must either be eliminated or be made useful. From his first announcement of the war saving plan, Secretary McAdoo has attempted to drive home this thought. A modern war cannot be carried on as an "extra" to business; business must be readjusted to the war.

To make such adjustment arbitrarily through federal edict would no doubt result in cases of injustice through errors in judgment. On the other hand, the combined action of all the people exercised through the wise expenditure of their money is the fairest and most effective means of determining which industries are necessary and which are not.

"Up to the present," says Mr. McAdoo, "there has been a relatively small denial of pleasures, comforts, and conveniences on the part of the average citizen. He is drawing upon the general store of supplies in the country with almost the same freedom as before America came into the war. This cannot continue without serious hurt to the nation and to the world. . . . It is easy to visualize the course of a dollar saved from waste and invested in government bonds or war savings stamps: First it goes to the Government as a loan for the war; second it is expended by the Government for food, clothing, and ammunition, which go directly to a gallant soldier or sailor whose fighting strength is kept up by the food, whose body is kept warm by the clothing, and whose enemy is hit by the ammunition."

H. M. Lord, of the Quartermaster Department under the Secretary of War, furnishes the following facts about the supplies, etc., that war savings stamps and thrift stamps will actually buy: [CONTINUED ON PAGE 28]

Troubles of a Tractor Inventor

Because I had seen many machines in operation and not one of them suited me, I decided that if I was to have a tractor to meet our needs I would have to build it myself

By George Martarian

WE NEEDED a tractor on our farm, so I started in to select one that seemed to fit my ideas of what a tractor ought to be. I got a score or more of tractor catalogues and went to see many makes in operation. In the entire lot there was not one that was just exactly what I thought an ideal tractor ought to be. The more I thought about it the more convinced I was that the tractor designers had spent too much of their time at the drafting table and not enough on a farm. Thus I came to the conclusion that if I was to have a tractor to meet our requirements I would have to build it myself.

Although I convinced Dad that I was competent to design and build a better tractor than was on the market, he suggested one of a well-known make as his choice. This was what I wanted. I got out my catalogues. I pointed out what I thought were the good and bad points of each. The result was I got Dad so mixed up that he could not decide upon one to use on our farm.

Then I suggested that the only way we could get just what we wanted was to design and build one ourselves. I explained that even if we did have to have a lot of patterns made and machine work done we could save so much on the labor of building it that it need not cost much more than a good standard one, and we would have just what we wanted. Dad gave his consent to go ahead with the plans.

It took me three months to finish the design. I had worked out every little detail, and felt that our tractor was going to be ahead of anything on the market. And why shouldn't it? Surely a farmer ought to know better what a tractor should do and what would be expected of it than some city designer who had scarcely seen a farm, let alone run a plow under all kinds of weather conditions.

For the next six months I had several blacksmiths and machine shops busy making the parts. We fixed up a place in the barn where we could assemble the tractor because we didn't want our neighbors to know what we were doing. As we assembled everything ourselves no one outside of our family had any idea what we were doing. As I watched our tractor grow, day by day, I began to believe that I had a tractor that was much superior to anything on the market, and that I ought to make them in quantities. I thought it would be a cinch to sell them, for farmers were anxious to get a good tractor, and this had so many novel features that it would sell itself. I thought of the advertising possibilities there would be in the slogan, "Built by a farmer for a farmer."

Finally the new tractor was ready to tackle a plowing job. Dad was quite enthusiastic about it and wanted to call some of the neighbors, but I objected because I wished to keep everything as quiet as possible until I got patents on several new design ideas I had developed. Of course I had not yet explained to Dad my great idea of manufacturing my tractor in large quantities. I wanted to leave this until after the tractor had proved its worth.

The next morning we ran the tractor around a 20-acre field. We changed speed, started, stopped, and reversed without the least trouble. I noticed at the time, however, that the tractor took an unusual amount of power to turn around. I attributed this to the fact that it was new and stiff.

We next hitched a two-bottom gang plow to the tractor, and started in plowing. After a half-dozen trips we were turning as pretty and straight a furrow seven to eight inches deep as you ever want to see. I ran the tractor and plowed until noon. I certainly was happy. During the noon hour I told Dad all about my plan for starting a tractor factory, but he was not so strong for it as I was. He thought farming was a good business and not such a risky proposition as manufacturing and selling tractors. I didn't think there would be any risk, for practically all the world was waiting for a real good tractor.

That afternoon I started in to make a plowing record, and was getting along fine when Dad came along with an idea that too much time was being lost turning around at the end of the furrows. He suggested plowing in a sort of oblong spiral, and then finishing the corners at the last.

This really was a good idea, because it meant plowing practically all the time, and surely would make a big difference at the end of the day. At the first corner I was surprised at the amount of power it took to make the curve, in fact, the tractor just did make it. Dad noticed this too, and thought perhaps the steering gear was stiff. We made a pretty good run that day, and felt that we had a tractor that was going to show the tractor manufacturers what a real tractor was like.

When I attempted to drive the tractor around a corner the next morning, the rear wheels dug themselves in. For more than two hours we tried to get the tractor to plow around a corner. We had to give it up, and just plow straight furrows. That night we got the tractor up on jacks and tried out the steering gear and front wheels, but were unable to find any binding or friction that could cause such a great consumption of power when turning.

The front steering design was one of my inventions. I prided myself that it was quite an improvement over all the rest. When Dad suggested that perhaps there was something about it that was wrong, I naturally resented it, but, since I was unable to find anything else, I thought I would please Dad by taking the drawings to Mr. Porter, an automobile engineer.

Leaving Dad to plow with horses, I went to town and explained our trouble to Mr. Porter and showed him the plans. "Well, I shouldn't think it would," said Mr. Porter. "Your geared quadrant arrangement turns both wheels through the same angle, so that they try to turn on different centers. This means that the driving wheels have to force the front wheels to slip around the corner. You will have to redesign that steering arrangement so that when the axles of the rear wheels and the two front ones are prolonged they will all intersect at one point and that point will be the center of the circle the tractor is turning upon.

"This must be the case for every position of the wheels. The only construction which will allow both wheels to turn through the same angle is the regular wagon gear, and, of course, in that arrangement one wheel also has to move ahead of the other so that the prolongation of all axles again meet at a common center."

All this was a great surprise to me, for I never dreamed there was anything wrong with my steering mechanism. That afternoon I got the tractor out and plowed straight furrows. I got along fine, but noticed that the wheels slipped as the plowing got nearer to the low part of the field. The reason for this seemed to be because the ground was rather soggy there, which made plowing harder and at the same time did not give the driving wheels such a good hold on the ground.

As the plowing worked into the lowest part of the field I had so much trouble with the wheels slipping and digging themselves in that I had to stop plowing there. I was pretty much discouraged. I consoled myself with the thought that I had only to make wider wheels when I installed the new steering mechanism.

I was not going to worry about that, because one could hardly expect to get everything right the first time. I moved over to a field that was high and dry and started in again. The tractor did steady deep plowing for nearly two hours, when flames shot up around the carburetor. I threw out the clutch, and shut off the fuel. Then I threw dirt over the carburetor, and in a few minutes had the fire out.

In designing my tractor I had run the exhaust engine under the carburetor with the idea that the heat from it would keep the carburetor and intake manifold warm on cold days. Dirt got into the needle valve, flooded the carburetor, a few drops of gasoline fell on the exhaust pipe and ignited, and the flash set the carburetor on fire.

I thought it best to run the tractor back to the barn. Upon turning on the gas, however, I found that the heat must have burned the cork float, because the carburetor flooded and could not be used. Dad got his team to tow me to the barn, but the horses couldn't budge the tractor.

I threw in the clutch and found that with an effort I could spin the engine and cause the tractor to move forward, but still the horses could not pull it. Then the reason for this dawned on me: I had a 50 to 1 reduction in my favor when cranking, whereas the horses were trying to spin the whole works backward with the gearing ratio against them. This thing I had not foreseen in my design, and so there was no pin or bolt I could take out to disconnect the gearing. It was nearly midnight when Dad and I got the big bevel gear out and the axle back in position.

The next morning at breakfast Dad asked me what my idea was about the tractor. I explained that it would be necessary to redesign the steering arrangement, the exhaust piping and make some change in the gearing so it could be disconnected in an emergency. I thought all this would take two or three weeks—then we would be over with tractor troubles.

Dad had something to add to this. He told me that we had spent nearly $2,000 and didn't have a tractor, and that if we had consulted someone who had had experience with tractor designing before we started building, mistakes would not have been made.

"Let us now profit by our failure," he said, "and call in someone to look over the tractor and the plans to see if there is anything else that should be changed or altered, then all the improvements can be made at the same time." He had heard that a Mr. Calderhead of Chicago was a tractor expert, and he thought it would be a good thing to have him come down and give his opinion, even if it cost $40 or $50.

When Mr. Calderhead came down I showed him the drawings, and explained all the improvements I had made over ordinary tractors. I admitted the mistake I made with the steering gear, the exhaust, and the transmission. After looking over the drawings Mr. Calderhead said he wished to congratulate me on my efforts, and that he had never seen such a complete set of tractor drawings so well executed by one who had had no previous experience in tractor designing.

An appreciation like this coming from a man who was an acknowledged expert gave me hope for future manufacturing. So I explained my idea for going into tractor manufacturing and making them by the hundred. I then took Mr. Calderhead into the barn to examine the tractor. Dad asked Mr. Calderhead to give us his candid opinion about the tractor, and what he thought about the possibilities of manufacturing them. [CONTINUED ON PAGE 30]

"Well," said Mr. Calderhead, "there are a great many things that will have to be changed before you will have a practical tractor

It's Always Fair Weather When Farmers Get Together—*By Edward C. Johnson*

Members of a Farm Bureau studying soil conditions on a run-down farm

New ideas and future plans for closer co-operation are discussed at the business meetings

CONCERTED action rather than individual effort is necessary to success. This is even more evident in wartime than when we are at peace. On the battle front the best organized attack accomplishes most. If armies do not work together victories cannot be won, and the co-ordination of effort of armies, planned by the best generals, is an outstanding example of the team work that is necessary for us at home. This is recognized by the nation's leaders as evidenced by the herculean efforts that are now made to organize, co-ordinate, and direct the war industries.

In the industrial life of the United States efficient organization of large groups for the making of profit was well developed before the war. The steel corporation, the railroad companies, the Standard Oil, and other industrial organizations are good examples.

In its agricultural life, on the other hand, while the number of organizations was large, there was no unity or concert of action among them. There was no mutual helpfulness and no well-defined purpose or program in which all could unite and make their force felt. "Everybody else is organized, therefore farmers must organize," was a common slogan. Many heard it, and as it expresses something of what they felt, they followed. Others, convinced that organization is necessary to progress, did likewise. As a result, while some farmers do not yet belong to any organization, probably the majority of them belong to some kind, and many to more than one. In many communities progressive men have been expected to become members of all organizations that have sprung up, and where these have been many this has not been easy. If, for example, the Farmers' Union, the Grange, the Farmers' Institute, and the Equity Union all are represented in one community, it is difficult to decide whether to belong to all or to center one's efforts upon one or two. If, in addition, there is a co-operative elevator, a Right Relationship League, a farmers' club, a live-stock breeders' association, a hog breeders' association, or a county fair, it is even more difficult to decide in which one or in how many one should maintain membership.

If the farmer were to attend the regular meetings of all, and in addition go to church, prayer meeting, school meetings, and other meetings called for special purposes, he might use as many as twenty afternoons or evenings a month in this way and yet not be able to be present at all the weekly, semi-monthly, and quarterly meetings, because necessarily several would be held at the same time. The same subject would be discussed at many of the meetings, the programs often would be similar if not identical, sooner or later the attendance would dwindle, and the organizations would suffer in consequence. While it would be rare, indeed, for anyone to belong to all of the organizations here mentioned, or as many, an instance is reported of a meeting of twelve men who represented forty-eight different "causes" or organizations in one community in a central State. These men came together to consider what could be done to bring more unity into the life of the community. This community was suffering not from lack of causes or the promotion of them, but rather from disorganization due to too many types of organization.

While the community referred to is not typical of the average, it is by no means an exception, and this instance shows the trend of organized life in the country until recently.

Every community has a number of interests. The social, the agricultural, the economical, and the religious are outstanding, and each of these has numerous sub-divisions. There is a tendency for a group of individuals to organize around each of the subdivisions to give it special emphasis. An organization is formed, the number grows, and no one stands for the whole group. Competition sets in between them and the sense of unity in the community is lost. The leaders, on studying the situation, recognize that they have permitted dissipation of the energy of the community through over-organization. Those living in a community where there are a dozen or more churches, where two or three are all that are needed for effective service and are all that can be supported, know what such an over-organized condition means. That it should be corrected is evident. In an effort to correct it, however, some organization may attempt to make itself the unifying force by trying to swallow all the others. In some cases it may succeed. If it does, it soon encounters the problem of how best to give attention to the multiplicity of interests in the community. If it attempts to serve all, its work may become so scattered as to be ineffective. If it directs attention to only one or two phases of the community life, some members of the community may feel that their interests are being disregarded. Convinced of this, justly or not they start a movement to form some new organization; it will not be long before others will do likewise, and the over-organized condition again will be the result.

Many Organizations Do Same Work

THAT the conditions here described are not theoretical is very clear to thinking men and women. Let us take Kansas for an example: Here is found the Grange, which emphasizes educational and social features, and in addition devotes attention to co-operative buying and insurance. Running parallel with it is the Farmers' Educational and Co-operative Union, commonly known as the Farmers' Union. Its principal emphasis is upon co-operative buying and selling, but it parallels the Grange to a considerable degree in its educational and social features. In fact, some of the unions, especially those that have had disagreeable experiences in co-operative work, are featuring the social side and education. The Farmers' Equity Union, also found in Kansas, in many respects parallels the efforts of the Grange and the Farmers' Union. The Society of Equity, found in one section of the State, devotes its energy largely to grain-marketing. The Anti-Horse-Thief Association, once powerful, still is doing a service in enforcing the law and as a police organization. It also emphasizes the social feature, and in this respect parallels the Grange.

In other States conditions are similar. In Iowa, for instance, the Society of Equity, the Grange, the Farmers' Union, the Taxpayers' League, and some other organizations are found: in Minnesota, the Farmers' Club; the Society of Equity, and the Right Relationship League; in Missouri, Illinois, and Wisconsin, some of these and several others. In other States of the Mississippi Valley and in the East similar conditions prevail. More recently the Non-Partisan League, avowedly organized to unify members of all farmers' organizations and to control the government in behalf of agricultural interests, has made rapid progress in several of the States. It has been recognized and warmly welcomed in the field by the Socialists as promoting some of the things for which they have stood for many years. It is militant, crowding into and covering the field of other organizations which, in some instances, resent this advocate of class control of the government machinery and a form of state socialism. It is asserted that this league is making common cause with the labor unions, and is endeavoring to become a strong political machine rather than a farmers' organization. At a recent meeting of the farmers' societies in Iowa the Non-Partisan League was recognized as a political party rather than an organization of farmers.

These members of an apple-marketing association realize bigger profits through organization

"What will become of the farmers' organizations of to-day?" is the question of many. The history of the Wheel, the Farmers' Alliance, the Northwestern Alliance, the Farmers' Mutual Benefit Association, and many others, shows that where an organization attempts a specific piece of work which fails to take into account what others are doing it disappears from the field sooner or later, and it may or may not have attained the object for which it was organized. Such an end can be avoided only if its work is co-ordinated with that of others.

There must be greater unity of effort and purpose of farmers' organizations than heretofore if they are to endure or be of the greatest service. This will come undoubtedly. The national need, the emergency of war, and the reconstruction period to come may bring it about with great rapidity. Indeed, recent actions among many farmers' organizations indicate that leaders now recognize the need for at least partial unification and co-ordination of programs. For instance, in Iowa representatives of a number of farmers' organizations recently met to consider plans for co-ordinating their work. The meeting of the so-called Federal Board of Farmers' Organizations in Washington, in February, was a similar attempt on a nation-wide scale. It is reported that representatives of some seventeen farmers' organizations were present at that meeting, and resolutions purporting to be the best thought of the organized farmers of the nation concerning the relation of agricultural interests and the war were adopted. The meeting of the National Farmers' Association at Kansas City, in February, was of a similar nature. This association invites representatives [CONTINUED ON PAGE 30]

"I'll Heat Your Whole House Through Only One Register"

I AM the **CALORIC**—the Original Patented **PIPELESS** Furnace.

I HAVE revolutionized the old methods of furnace heating by doing away with expensive, ugly, heat-wasting pipes.

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I AM, therefore, as suitable for your old house as for a new one. Just a corner in your cellar for me and my fuel and a place above for my register.

I HEAT by Nature's own method—circulation. Sending up great volumes of moist, balmy warmth, I draw in thru the outer part of my register the cold air my heat displaces. This is reheated, purified by my fire and sent forth again to add to your comfort.

I PRESERVE the health of your family. Just as running water purifies itself, so my method of circulating heat means pure warm air to breathe.

I SAVE you money by heating your **whole house** with no more coal than you need for heating two or three rooms with stoves. My maker guarantees I will **save you at least a third;** thousands of my friends say I save them half, and more.

I AM BUILT by the oldest and largest makers of stoves and furnaces and sold by several thousand of the leading dealers throughout the country. Both my maker and your dealer **guarantee** my claims to the utmost.

I WANT to come to your home to bring you, as I have to 50,000 others, increased comfort, greater convenience, better health in winter, and with it all a great saving of money. Will you have me? I can come right away, as my installation requires only **one day,** without interrupting your present heat.

Write my makers for a very interesting catalog telling all about pipeless heating in general and me in particular. **Send for it today.**

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PIPELESS CALORIC FURNACE

TRADE MARK REG'D

TRADE MARK REG'D

FARM AND FIRESIDE

The National Farm Magazine

Founded 1877

Published Monthly by

The Crowell Publishing Company

Springfield, Ohio

HARRY M. ZIEGLER, *Managing Editor*

ASSOCIATE EDITORS:

B. F. W. THORPE H. H. HAYNES HELEN L. CRAWFORD

ALDEN PEIRSON, *Art Editor*

By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

SEPTEMBER 1918

If Your Copy is Late

YOUR copy of the magazine may be a little late these days because the railroads are congested with troop trains and shipments of war supplies. Be patient, therefore; you will get your magazine after a few days' delay—at the very most.

"When the Devil Was Sick"

WHENEVER things are not going well for Germany we may expect to find her a peace-loving nation, fighting a purely defensive war, and very solicitous for the welfare of everyone.

Germany began the use of poison gas in contravention to international agreement. Now that she has discovered the prevailing winds in France favor the Allies, she wants all warring nations to stop the use of poison gas. This is a typical Hun trick.

When the future looked very dark for Germany a year ago, the Reichstag adopted the "no annexation, no indemnities" resolution. When Russia was counted out, and conditions looked brighter, Germany laughed at the Reichstag resolution.

Germany has bombed London and Paris more than a hundred times during the last four years. Now that the Allies can and do bomb the munition-manufacturing towns along the Rhine, Germany is only too eager to stop the practice of bombing towns, because it results in the killing and wounding of defenseless women and children.

With the situation on the western front looking very bright for the Allies because more than a million Americans are in France and another million will arrive before winter, Germany says that she has no idea of holding Belgium. This is the same old German trick.

Only when Germany regards conditions favorable to her does she appear in her true colors, an unscrupulous military-governed nation, fighting a war of conquest.

As Francis Rabelais said more than four hundred years ago:

> The devil was sick—the devil a monk would be.
> The devil was well—the devil a monk was he.

Protecting Your Family

FARMERS as a rule are careless as regards life insurance. Perhaps it is because they are not visited by insurance solicitors as frequently and as persistently as the average city man. Yet the farmer deposits his savings in the bank without waiting for a representative of the bank to call upon him and advocate the desirability of opening an account. Why is he so careless or thoughtless in the matter of making ample provision for his loved ones after he shall have gone beyond?

The farmer has a long memory. He recalls the insurance investigations of a few years ago, which disclosed a sorry, even if not a scandalous, state of affairs. He remembers having heard of immense salaries paid to insurance company officials at a time when his own corn and wheat and hogs were bringing low prices. But that was the abuse of the system, rather than the use, and those investigations resulted in doing away with most, if not all, of the abuses.

The life-insurance business to-day is about as systematic, efficient, and well-ordered a business as is to be found anywhere in the world. Life-insurance companies make money; but, on the other hand, they take risks and they have great fortunes invested.

No man needs life insurance more than the farmer. The farmer who succeeds is the one who keeps his money, as well as his acres and his fields, constantly working for him. The farmer does not pile up large balances in the bank: he buys more land, builds a better home, adds more stock, buys more machinery, and so on. Should death come to him suddenly, there is often the need of a dispersion sale at which animals are sacrificed at considerable below their value. Had the farmer left a few thousand dollars' worth of insurance to enable his wife to pay off his debts and tide the family over for a few months or years, there would have been no loss through forced sales. Far better a few insurance policies than that the farm should be sacrificed.

To Stop Leaks

ON AN average at least one bushel of corn is destroyed each year by that king of rodents, the rat, on each of the 6,361,502 farms in the United States. That means more than six million bushels of good grain absolutely destroyed. At the rate of $1.60 a bushel, that corn would sell for more than nine million dollars. In the same way, and quite in the same proportion, wheat, oats, rye, and buckwheat are sacrificed to the rat. What a fearful toll, and especially so when the world need is so great!

The rat, aided by his pestiferous but always busy partner, the mouse, destroys annually tons and tons of fine fruit and vegetables stored in cellars all over our country. There is no way of correctly reckoning this loss. But it is certainly stupendous. Vast stores of mill feeds are wasted by sifting through the cracks of leaky troughs. Great stacks of hay are trodden underfoot and spoiled because it is fed out on the ground and not in racks. So, too, with corn fodder.

The losses in our households, though now much lessened, still aggregate enough to feed and clothe many of the suffering destitute of the world.

Our part in direct support of our fighting allies and in hurrying an irresistible force to the battle fronts is a magnificent achievement. But we who remain at home can make our continued future help to the cause for which we are fighting more generous and sure by stopping every leak and waste indoors and out. A bushel of grain saved from waste is another bushel raised.

Tulips and Hyacinths

ARE you going to have some beautiful tulips and hyacinths next spring? If so, it will be necessary to lay your plans and plant your bulbs this fall. Late September and early October plantings generally give good results.

In selecting bulbs it always pays to buy choice ones, as the cheaper sorts seldom give satisfaction. If the pocketbook permits, buy also a few of the rare, new kinds. The cost, it is true, is considerable, but the pleasure in watching and wondering, the joy in the excellence of production, will be in keeping. Anybody likes to have at least some of the very best.

For planting either in pots or out of doors, a selection should be made so as to have the flowers well distributed, rather than have all bloom at once. Of course, in tulips all of us want some of the long-stemmed Darwins. These bloom late and continue beautiful for several weeks. Earlier sorts should be planted nearer the front or outside of the bed.

One serious objection that many persons find in trying to grow bulbs is the work of moles. These animals get into the flower beds and eat the bulbs. We have been able to prevent this by making a mole-proof bed. Having tin from an old roof, we used this as a lining and siding, first punching the tin full of small holes. This has worked very satisfactorily for three years. In any such arrangements (closely woven wire would serve) care must be taken to have the protection come up a little above the surface of the ground. If not, moles may make their way into the bed.

For bulbs, good drainage is necessary. Planted in pots, small stones or cinders should be placed in the bottom. The same system is good for a bed out of doors. Soil should be a sandy loam without fresh manure in it. For out-of-door planting we prefer bulbs four or five inches deep for a southern exposure, but not so deep on the north side During winter, cover beds with leaves, straw, or other material and weight down so winds will not blow it off. The beds will have to be uncovered in the spring.

A New Era

THE trouble with many farmer movements in the past has been that the members would not stick, either together or separately. They entered into the campaign, whatever its object, with enthusiasm and high promise. But a life of semi-solitude took the enthusiasm out of many a man. Campaigns are kept at fever heat by means of rallies, the interchange of ideas, the commingling of men of similar views.

Farm life in the past made this well-nigh impossible. For that reason many a farm movement which deserved to succeed has gone down in ignominious defeat. This is fast being changed. The tendency of the day is toward getting together. Neighborhood clubs are springing up throughout the countryside; a dozen or a score of families meet at stated intervals, there is a set program, a basket or a picnic dinner, and the whole community is thus bound together.

"We'll stick" would be a good motto for any worthwhile organization of farmers. If there is any class of workers to-day which needs to be congealed into a homogeneous mass that will stick together, it is the farming class.

Here is a missionary work ready to the hand of every farm family wanting to see our chosen calling take its rightful place in our national life.

The Motor Truck

THE automobile truck has proved its usefulness on the farm, and its general adoption is now merely a matter of time. The custom of hauling hogs to the South Omaha market from Iowa and Nebraska farms within a radius of 50 miles has become very general.

Last summer someone in South Omaha territory tried the experiment of trucking a load of hogs to market. The experiment worked like a charm. Four miles an hour had been good time with a horse-drawn wagon. An automobile truck easily makes fifteen miles an hour. At first, most of the stock trucking was done at night, to avoid the extreme heat of the day. The farmers simply telephoned to Omaha or Council Bluffs and hired truck owners to do the work. Some nights as many as four trucks would start out from a city garage to get the market produce of one farmer.

As the experiment grew in popularity, so did the field which it covered. It was not long until a Council Bluffs truck dealer received an order to come to a farm near Briscoe, between 65 and 70 miles distant. He loaded 31 head of hogs, weighing about 100 to 125 pounds each, in his truck, converting it into a double-decker for the occasion, was on the road about four hours, and got the animals to market in far better physical condition than if they had been jolted along behind a slow team.

For the first time in farming operations the truck is being looked to by the farmer for assistance. Considerable of the 1918 wheat and oats crops in central Illinois was threshed by a separator hitched to the motor of a truck, supplanting the usual steam engine. The shocks of grain would be conveyed to a central place in the truck, then the belting would be attached to the motor, the truck would be harnessed to the separator and made to thresh out the grain which it had just hauled. Later the truck was used to haul the grain to market.

The farmer has come to learn that his automobile can be used for much more than mere pleasure, and the automobile has opened his eyes to the possibilities of the motor truck. Now, instead of hiring some city man's truck, he is buying one of his own.

Food Mark for Us

WHEN farm help fails us and crop prospects are not very bright, let us not despair, but brace our courage by the accomplishment of our heroic fellow farmers in France, made last year under an even greater difficulty.

After four years of a heart-breaking, strength-sapping war struggle, the meager but magnificent remnant of French farmers, supplemented by the splendid, unconquerable French women, produced and harvested even a greater quantity of food staples in 1917 than in 1916. This year's prospects are bright, too.

All of the following listed staple food crops equaled or exceeded the crops harvested the previous year: Maize, potatoes, millet, buckwheat, artichokes, cabbage, beets, turnips and beans. Of these, millet was increased 50 per cent, buckwheat 30 per cent, and potatoes 12 per cent.

Naturally, to accomplish such a feat under such a handicap, the less essential crops, such as tobacco, hops, and some forage crops, had to be discontinued or reduced.

My Short-Cut Accounting

By P. W. Coombe

FOR brief, ever-ready bookkeeping and diary entries, I have found nothing in the line of a time saver equal to a large-sized calendar having plenty of blank space in the squares containing the figures allotted to the days of the month.

With a sharp pencil hanging by the calendar, I am able to make a surprisingly valuable record with only a moment's time daily. For example, I find that the square devoted to February 24, 1918, shows that our first lettuce was planted and the first hen was set. The right-hand corner at the top of the square always shows the eggs laid by the little flock of hens for that day, which on February 24th was 14 eggs.

Saturday of each week the entry in the lower left-hand corner shows our weekly butter production, which for the week above specified was 25 pounds. In the remaining space of each daily square I jot down various entries and figures.

Besides, matters to be attended to at future dates are entered ahead in their proper places, and when given attention I erase to reuse the space for records. There is a space at the bottom, sides, and top outside of the date squares for general data and totals of the various accounts.

Many a busy household can keep a surprising number of valuable records with an expenditure of time not to exceed two or three minutes daily by this plan.

New Kansas State Dean

By N. A. Crawford

AFTER wide experience as a practical farmer and live-stock man, as a teacher and as a representative of the U. S. Department of Agriculture, Francis D. Farrell has accepted a position as dean of agriculture and director of the agricultural experiment station, Kansas State Agricultural College. He took up his new duties September 1st.

For the last four years Mr. Farrell has supervised for the Government the establishment of agricultural industries on irrigated land in fifteen Western States. He was brought up on a Wyoming cattle ranch, going from there to the Utah Agricultural College, from which he was graduated in 1907. In addition to his experience with the U. S. Department of Agriculture, he was for some time on the faculty of the University of Idaho.

Francis D. Farrell

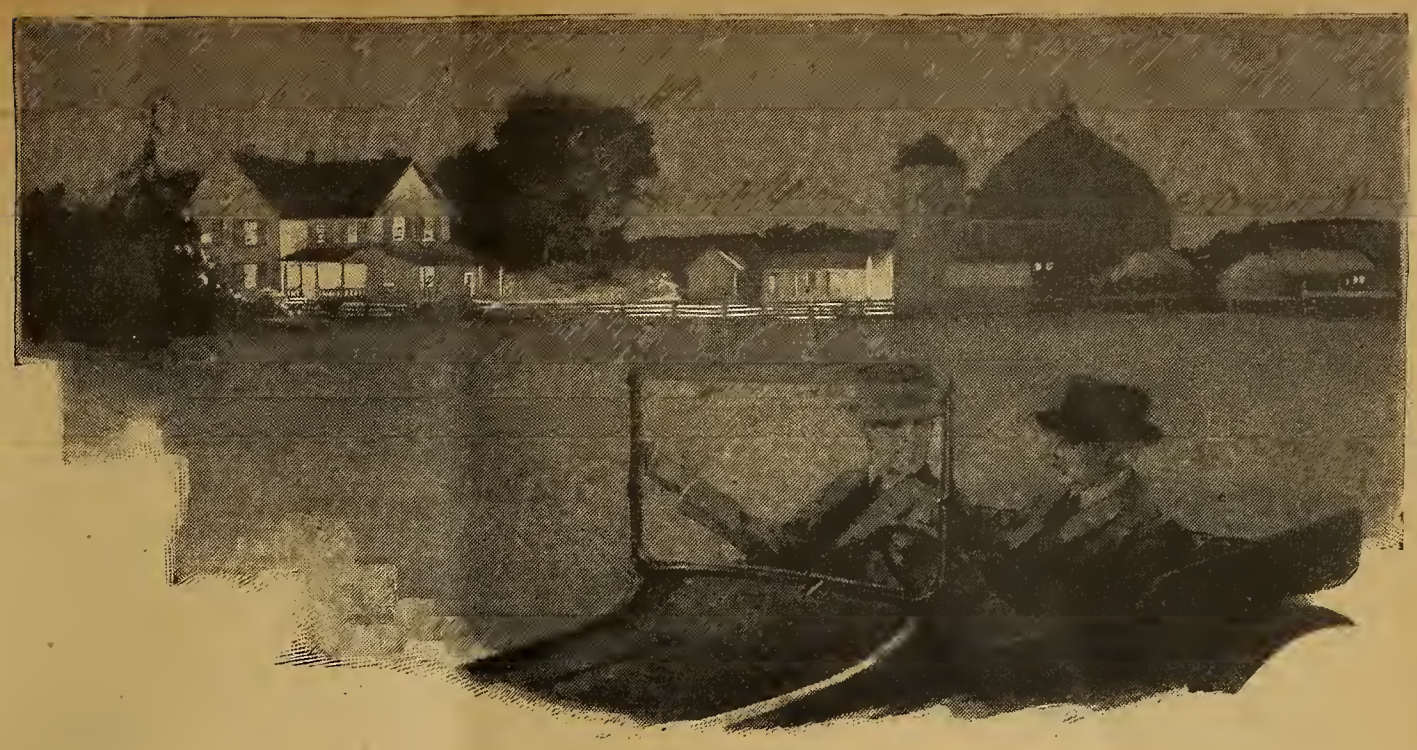
Hooverizing Honey-Bees

By Thayer S. Hurd

NEVER before was the product of the beehive so popular and indispensable as now. Even before the war made additional demands on sugar and sweetening products, our production of honey was increasing, but the increase was due to the enlarged operations of bee specialists.

But the present number of experienced apiarists is much too small to harvest the honey crop without loss. Honey authorities estimate that the flower nectar unharvested is ten times greater in quantity than that which is gathered and made available for human consumption by bees.

The best solution of this problem appears to be the encouragement of enlarged operations by experienced beekeepers by means of branch apiaries which can be given expert supervision, thus providing for the harvesting of honey over greater areas.



Generating plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

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He accepts these things as actual advance assurance of his own future satisfaction.

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Farm products and farm buildings are more valuable. Lalley-Light safeguards them by removing the fire risk entirely.

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In addition, it has its own exclusive advantages which the nearest Lalley-Light dealer will gladly demonstrate and explain.

Write us for his name, and for complete details.

Look for the Lalley-Light demonstrating exhibit at your state or county fair this fall.

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The Allied Armies must be fed and therefore it is necessary to save every bit of the crop of the Continent—American and Canadian. Those who respond to this appeal will get a

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A card entitling the holder to a rate of one cent per mile from Canadian Boundry Points to destination and return will be given to all Harvest Applicants. Every facility will be afforded for admission into Canada and return to the United States. Information as to wages, railway rates and routes, may be had from the

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GOODYEAR
AKRON
TUBES

Balloon Strafing

[CONTINUED FROM PAGE 5]

I went into the sheds to assist in geting the machine prepared. The bomb tube was fastened to the outside of the fuselage on the right-hand side of the pilot to be within easy reach. The engine was tested to make sure of its running ability. Everything being ready, Lieutenant B. and I piled in. The mechanics passed bombs up to me, twenty in number, and I piled them between my legs to keep them from rolling about.

What would happen to me if an archie shell hit us? Well, one thing sure, we would never know when we hit the ground.

The engine was started again. Lieutenant B. signaled the mechanics to remove the chocks from in front of the wheels, and we taxied slowly out to the aërodrome. Being so heavily loaded, we had to run on the ground farther than usual but we managed to get off just in time to clear the sheds.

We slowly circled the aërodrome in wide arcs to gain altitude, but the old bus climbed so slowly that it took us nearly an hour to make 7,000 feet. Once at that height we headed towards Arras, still gaining altitude. By the time we had passed the lines just east of the town we had made another thousand feet. Here the enemy's observation balloon came into view.

Whether they suspected our purpose or not, they opened up a particularly vicious fire on us from the ground. At one time I caught the whistle of a chunk of shrapnel steel above the noise of the motor. Two or three small pieces flew through the planes, but without much damage. The nasty dark puffs of smoke from the explosions were all around us. But Lieutenant B. was coolly weaving a zigzagged way along the river Scarpe, always working toward the balloon.

Wee-ef-e-e-e-e-e! One archie shell cracked so near that the concussion rocked us like a rowboat on troubled waters. A downward glance revealed the big gas bag below us and probably 1,500 feet above the ground. We could see the motor winch on the white road below, a storage balloon, and another captive balloon being inflated.

The barrage fire increased in fury as we headed for the balloon in a steep nose dive. We shot through the first ring of explosions without getting more than two splinters through the planes.

We dove through two more barrages, without serious damage, to a position directly over the balloon. The anti-aircraft guns now ceased their fire because the falling shells were liable to hit the balloon. I passed the first bomb over to Lieutenant B., who dropped it through the chute. The bomb missed the balloon by 200 yards. We made a turn and repeated the performance without result. By the time we had made several more attempts to destroy it, the balloon had been hauled down. The archies took up their task again and re-engaged us with greater fury than ever.

Then one of the bombs became fast in the tube. There was nothing for us to do but to cross over to our side of the line to avoid the anti-aircraft fire while we fixed it. After working desperately at it for what seemed like hours to me, but in reality only a few minutes, the bomb fell out.

Perhaps the Huns thought we had given up the job. At any rate, they had the balloon back up again when we returned. We dove through the three barrages, and circled around above the balloon, dropping bombs whenever we thought there was a chance of making a hit. I didn't count them—you can imagine why—but the sixteenth or seventeenth must have done the trick. Almost coincident with the appearance of a tiny flame which darted from the top of the bag two parachutes were released with the observers. Whether they didn't think we could hit the balloon with bombs, or whether they were just foolhardy, I don't know; but those two observers had hung on until the very last, and came down almost entangled in the burning wreckage.

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The observer's basket of a French captive balloon

We dropped the remaining bombs for good measure, and headed for home, hotly pursued by three Hun planes. Having no guns we couldn't give battle. There remained nothing for us but to outwit them. Therefore, in order to avoid their fire and to increase our speed, we dived to within 500 feet of the trenches, beating it for our own lines as fast as we could fly.

As we crossed to our side at that low altitude the machine gun fire redoubled in intensity. Holes appeared in our planes and fuselage. It was miraculous that neither of us was hit. The old machine looked like a sieve, but she kept right on flying—doing better if anything than before. Therefore we climbed back up to about 5,000 feet to get a view, the Hun airmen having stopped pursuit when they encountered our own fire.

The sight that met our eyes filled us with joy. The burning bag had apparently set fire to the storage balloon and the captive balloon on the ground. We could also see several small fires among the buildings.

That satisfied the Lieutenant. He headed the plane straight for home. At the aërodrome we found the two squadrons who had already received the news, out to pick up the remains and give any survivors a much-needed drink.

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These French soldiers are removing unused torpedoes from a wrecked Hun plane, brought down by an American aviator near Nancy

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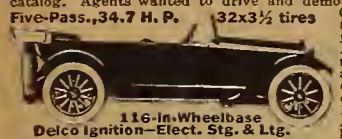

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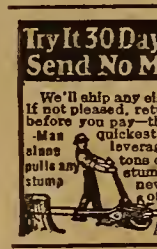

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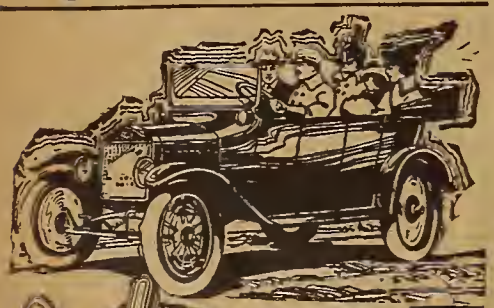

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Planning Your House

By William F. Miller

PERHAPS you will not employ an architect to plan your house. Whether you do or not, one of the best ideas for a first-floor plan is the situation where from a central position on the interior a view can be obtained of the barnyard and the main road. This saves many steps and is easily accomplished.

Be careful with that arrangement, so you will not stultify yourself about the planning of the rooms on the second floor. You may have the stairs in the proper position at the starting point without any thought of where they will end in the story above.

Have your carpenter figure how much head room there will be at the point on the rake of the stairs where a wall or gallery board crosses. A mistake can easily be made at that place, and it is not only done by owners but oftentimes also by contractors and architects.

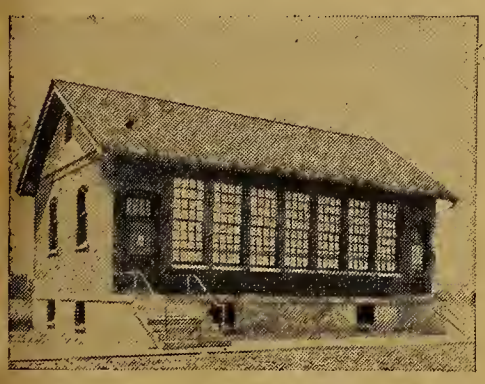
Very often, over a reception hall, a well-planned bedroom is laid out on paper, but when it is actually built it will be an ill-shaped affair, owing to the necessary break for head room above the stairs. It would have been an easy matter to change that on paper or discard the idea entirely, but if the walls are built and the joists set, it becomes expensive to correct. It is one of the common mistakes that do not show until the construction is well under way.

District School No. 6

By S. C. Burr

HERE and there the district school is coming into its own. The "little red schoolhouse," or white one, is being replaced in certain progressive communities by a structure which is truly modern and hygienic. When it is remembered that through nine months in the year children in agricultural districts spend perhaps a third of their waking hours in school, it would appear obvious that communities which can afford modern dairy barns, automobiles, tractors, and other improved equipment might more commonly provide better schoolhousing for their children.

District School No. 6, as it is officially recorded, stands in Wisconsin not a great distance from the Illinois line. It will be



The modern "little red schoolhouse"—District School No. 6

noticed that the windows are all on one side of the schoolroom. The opposite wall is occupied by blackboards. In this way annoying glares and cross lights are eliminated. Each pupil receives the light from over his left shoulder. The windows are exceptionally large, and occupy practically the entire south side of the building. As a result the schoolroom is one of the sunniest and most cheerful imaginable.

Separate entrances and cloakrooms are provided at either end of the building. The approaches are of concrete, and the entire space between the steps at either entrance is floored with the same material, which provides a convenient place for the children to play in muddy weather.

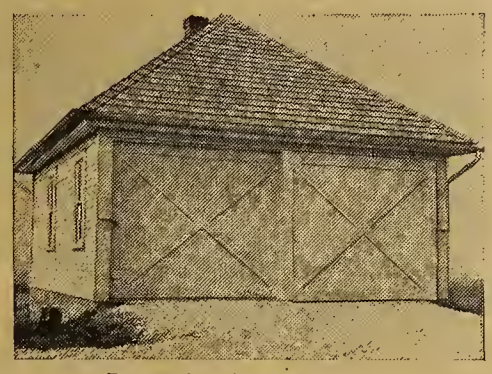
The building has a complete heating and plumbing system, and the installation of a small electric lighting plant is also being considered.

Upkeep of Buildings

By James Williams

IN MANY lines of business to-day a certain amount of money is laid aside each year for maintenance. The railroads find it economy to spend enormous sums for keeping up their buildings and rolling stock. The same is true of all large manufacturing concerns. If this money were not spent on upkeep of factories, buildings, and machinery, in a few years they would be practically worthless.

The thrifty and far-sighted person of



Room for the tractor too

to-day conducts his farm affairs on similar lines, a certain sum of money being laid aside each year for the upkeep of the exterior and interior of the farm buildings.

A touch of paint or varnish at the right time means but little trouble, and not only keeps the place in excellent condition, but also saves a heavier expense later on. Keeping up the appearance of the buildings, both outside and inside, not only gives your place an atmosphere of prosperity, but also enhances its value.

If you are an expert in painting, your own judgment will enable you to select the proper paint. If you are not an expert, better than relying entirely on your own judgment, or that of your painter, is to have the reputation of a reliable manufacturer back of your decision.

In deciding on a paint for the outside of your building, there are three kinds from which to choose: good prepared paint, honestly mixed and ground by the best machinery; lead in oil, bought separately and mixed by hand; low-priced prepared paint in the manufacture of which the quality of the raw materials have been sacrificed to secure a cheap price.

Good prepared paint is the most satisfactory and economical paint you can buy. Lead and oil, which are the two principal ingredients of all good prepared paints, are good as far as they go, but they don't go far enough. The introduction of some harder pigments in proper proportions is necessary to produce the most durable paint. In good paint, pure lead and zinc in proper proportion form the basis of the pigment. The proper combination of lead and zinc neutralizes the individual faults of the two, and the resultant paint film is not so soft as to be chalky, nor so hard as to crack and leave a poor surface for repainting.

Our October Number

SOME of the good things in the next issue are:

The opening installment of a thrilling story entitled, "The Mystery at Glen Cove," by Howard O'Brien.

"Ledrans, a Farmer of France," by C. W. Wagon.

"First Year of a $5,000 Farming Venture," by Henry Highfield.

"When Our Family Dolled Up," by R. M. Boyle.

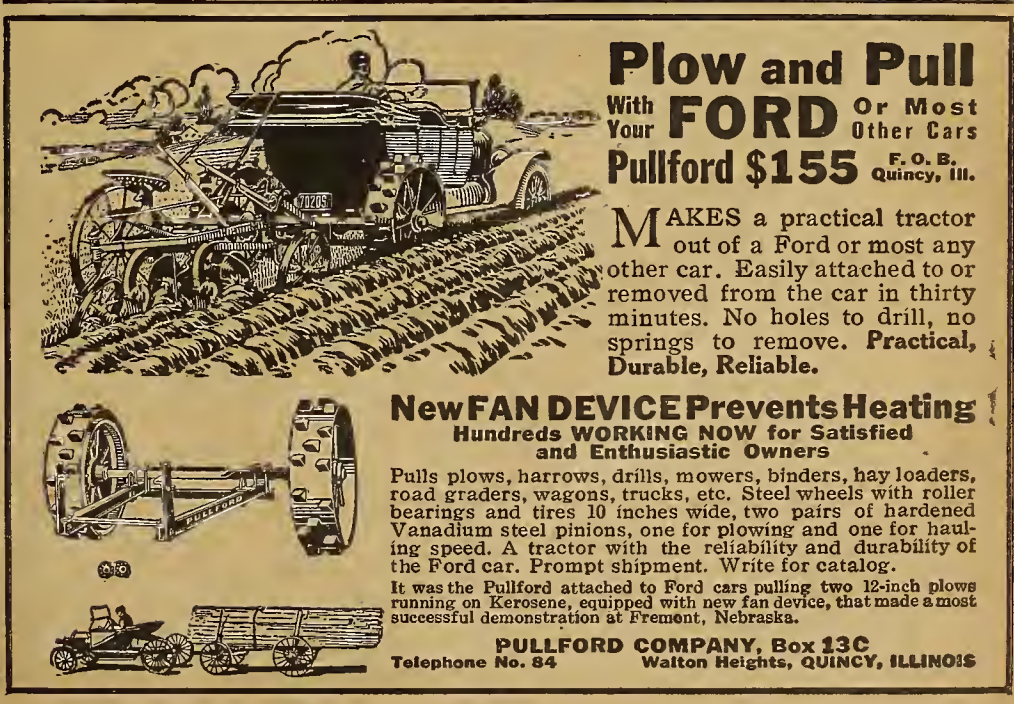
"Apple Harvest at Montevista," by Helen H. Murphy.

"Making Beef with Silage," by T. J. Delohery.

"A Cottage for Two," by William F. Miller.

"The Wheat Wouldn't Wait," by George E. Piper.

"Brighter Babies" is a wonderful double page of pictures.



All Nutrients of 70 Gallons Milk in Every Sack of

SUCRENE DAIRY FEED

Every 100-pound sack of Sucrene Dairy Feed supplies your cow with 16½ pounds of protein and 49½ pounds of fat and carbohydrates—equal to the protein, fat and carbohydrates contained in nearly 600 pounds of whole milk. This

High Nutritive Quality of SUCRENE DAIRY FEED

is secured and always maintained by a scientifically correct combination of materials whose high feeding value is proven beyond question and universally recognized—Cottonseed Meal, Corn Gluten Feed, Corn Distillers' Dried Grains, Palm Kernel Meal, Ground and Bolted Grain Screenings, Clipped Oat By-Product for necessary bulk; Pure Cane Molasses for palatability, aiding digestion and promoting health.

Sucrene Dairy Feed is a complete milk making and body maintaining ration—no other grain or concentrates needed to increase milk yield. Relished by all cows; cuts cost of milk production; saves grain.

Order a ton from your dealer. If he does not handle it write us his name and we will see that you are supplied. Fill out and mail us the coupon for valuable literature on care and feeding of farm animals.

American Milling Co., Dept. 32, Peoria, Ill.

Sucrene Feeds for All Farm Animals—18 Years the Standard

Ohio's Highest Yielding Herd Fed for Years on SUCRENE

My herd of 155 registered Jerseys and same number of calves have been fed Sucrene all their lives. They are said to be the heaviest milking herd in Ohio.

JACOB L. WHITE, Proprietor Spring Grove Jersey Farm, Greenfield, Ohio.

Please send me illustrated literature on feeds checked below: (32)

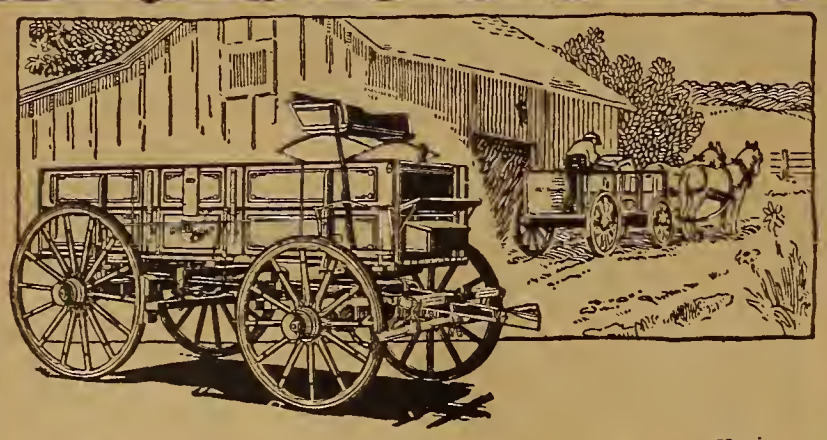
- ☐ Sucrene Dairy Feed
- ☐ Sucrene Calf Meal
- ☐ Sucrene Hog Meal
- ☐ Sucrene Poultry Mash
- ☐ Amco Fat Maker for steers
- ☐ Amco Dairy Feed (25% Protein)

My Dealer's Name .....

P. O. ..... *State* .....

My Name .....

P. O. ..... *State* .....



Capacity Guaranteed

TELL the dealer you want a wagon that the manufacturer will guarantee to carry your biggest load. If he is up to date, he will show you a **Weber** or **Columbus** wagon with its capacity stenciled in plain figures on the rear bolster. That is the new idea for protecting you in your purchase of a wagon.

When you bought by skein size, you could not be sure that you were buying the most economical wagon. Now you can be sure. Every **Weber** and **Columbus** wagon that leaves the factory is guaranteed by the manufacturer to carry a known load over the roads that you have to travel.

Nor is that all you get when you buy a **Weber** or **Columbus** wagon. The folding end gate and link end rods save you a world of time. The fifth wheel, which only **Weber** and **Columbus** wagons have, makes your wagon run easier and last longer. Write us for complete information about these wagons. You'll be surprised at the number of good features they have.

International Harvester Company of America
(Incorporated)
CHICAGO U S A

Champion Deering McCormick Milwaukee Osborne

National Tractor Show

By H. H. Haynes

THAT farmers want the tractor to eliminate nearly all of their horses; that they want it to be adapted to all of their tools; that the manufacturers are standardizing their models—these were the outstanding features of the National Tractor Demonstration held at Salina, Kansas, July 29th to August 3d.

Tractor manufacturers, like the automobile men, are finding that their best efforts can only be realized through a standardization of their product. A few are concentrating on one model. This enables them to cut down its cost, and consequently its selling price. Others who make several sizes are following the same general style and construction in all their models. This idea will result in their being able to give the best possible machine for the least money.

One man who operated 200 acres of land said he was looking for a tractor which would make it necessary for him to keep but four head of horses. He, like hundreds of others I talked with, believed the tractor's ability to eliminate horses was its biggest asset. They all emphasized the necessity of a tractor being used with a large variety of tools. The demonstration showed that manufacturers have taken big steps toward meeting these needs.

Each plowing outfit had an interested crowd of spectators

Nearly 3,000 acres of land were available for demonstration purposes, and practically the entire amount was plowed. The plows ranged from one, drawn by a small tractor with the operator walking behind, to large gangs of ten or twelve-bottoms, pulled by huge tractors that seemed to make no work of it at all. The disk plows did excellent work too. The majority of the tractors pulled from two to four bottoms. It was around this size machine that the interest seemed to center. Tractors of this capacity are adapted to the medium-sized farm, and at the same time have power enough to show up well on the belt.

Excluding the men connected with the different tractor companies, it is estimated that the average daily attendance was about 30,000 persons. This crowd consisted largely of farmers and their families. Pennants from all of the nearby States could be seen on the thousands of cars parked at the grounds. This showed the great interest in this national power farming school. The women were just as interested as the men, and followed the various demonstrations with no thought of the inconvenience of dust and heat.

Representatives attended from several foreign countries. These men were deeply interested in the demonstrations and experiments. Many of them bought tractors. The American tractor in the foreign field is nothing new. One company has more than 12,000 tractors in France, England, Italy, and Russia, while another company has orders for 600 machines to be sent to Italy.

It was shown at the demonstration that the tractor plays a great part in preparation of the seed bed and in planting the seed, as well as in the plowing. Double disks, drills, packers and rollers were all handled in the same operation. The ability of the tractor to draw several tools at the same time is one that can not be too highly emphasized, as it is only in this way that its greatest point of efficiency can be reached.

There were forty-eight exhibitors who took part in the demonstration. Some of these concerns had three and four tractors of different sizes in the field, while others had but one model. Between 80 and 9 tractors were in operation each afternoon

No acreage of simila size was ever plowe more quickly. Th distance plowe ranged from 110 rods the shortest length o furrow, to 140 rods the longest. Notwithstanding the heat, eac tractor had its crow of spectators for th entire trip across th field.

Every point consid ered, the Nationa Tractor Demonstration can be called a unqualified success and its promoters deserve a great deal o credit for their stre uous work and effor as do also the peop of Salina for th thoughtfulness a hospitality.

At a meeting of t National Tractor Committee it was decid to discontinue the demonstrations un after the war. The committee felt th until the war is won the main business the country was to help in the successf prosecution of the war, and to let no other interests interfere.

Quick Repairs

HOW many times in the rush season have you gone to your farm shop or workroom for repairs, and after lookin high and low for half an hour finally foun what you had an idea you could lay your hands on at a moment's notice? We a have had this experience at one time o another, and have resolved each time to straighten things out. But somehow we never seem to get to it.

If the next rainy day, or possibly a noon when the horses are still eating, yo give the shop, or whatever building yo use for repair work, a thorough cleanin it will not be necessary to spend a half hour in looking for something that yo should be able to find in half a minute Small things like bolts, washers, nu screws, etc., should be sorted into the respective sizes and placed in pigeonhol especially constructed along the wall f this purpose. Tools can be hung in rac over the workbench.

A section of the "Tent City" at the Salina demonstration

Oil Cheaper Than Bearings

By Alvah H. Pulver

MANY automobile owners have a habit of continuing to use oil as long as it will last, merely adding to the quantity from time to time, and paying no attention to the quality of that which is left. By many careful and experienced owners this is considered a bad practice. When oil has been circulated in a motor it slowly loses its lubricating qualities and gets thinner. This is because by some means it slowly absorbs gasoline, which dissolves it.

Experiments have shown that oil taken from a motor after use can be returned to its original condition by heating it to a temperature a little below the boiling point and keeping it hot until all the gasoline has been driven off. If after this treatment it is filtered through fine material, it can safely be used again in the motor, but to go so laboriously through all this in order to save a gallon of oil is not worth while, and it is better to throw dirty lubricant away and fill up with fresh. It is important to wash out the motor frequently, and severe damage can be done by failing to remove dirty and worn out oil. A maxim worth remembering is that oil is cheaper than bearings.

It is also important that the radiator system be kept clean. There are many radiators in use that have not been drained in a year. This is wrong. Radiators should be flushed out once a month, and if possible should be cleaned by letting boiling water and soap run through. There is sure to be

The sharp autumn air gives zest to motoring

sediment in the bottom after several weeks' use, and it is always best to clean the radiator thoroughly and keep the water circulating at its maximum efficiency. The radiator should have sufficient capacity to take all heat out of the water and return the water to the jackets in such condition that it is at the proper temperature to take away the heat from the combustion chamber.

In refilling the water system, there is no danger in pouring cold water into the radiator, no matter how hot the engine might be. But if so much of the water has been lost that the tops of the cylinders are uncovered, the engine should be allowed to cool off before the water system is filled. The reason is obvious—if cold water is poured directly on the hot cylinders where they are exposed, there is danger of cracking them, owing to the contraction due to the rapid cooling effect of the water.

Inner-Tube Value

AS a rule, motorists place too much stress on good casings and pay too little attention to inner tubes. If the tube does not do what is expected of it, the best casing made will not stand up.

The life of any casing depends on the proper inflation of the tube, and if the latter is inferior and allows more than the ordinary escape of air, the life of the casing will be shortened accordingly.

Air, being a gas, will permeate any solid to a more or less degree. Manufacturers of good inner tubes make them as near airtight as possible. It stands to reason that a new tube is more efficient and will hold the air better than an old tube that has seen a season's service, even though the latter might look all right and appear free from blemishes of any kind. Also remember that we are now referring not only to new tubes but also to good tubes.

Don't let a dealer sell you a low-grade big profit tube. Buy the best. In many cases the average motorist could throw away the tubes he is now using, substitute four good ones, and still be ahead.

BEST IN THE LONG RUN

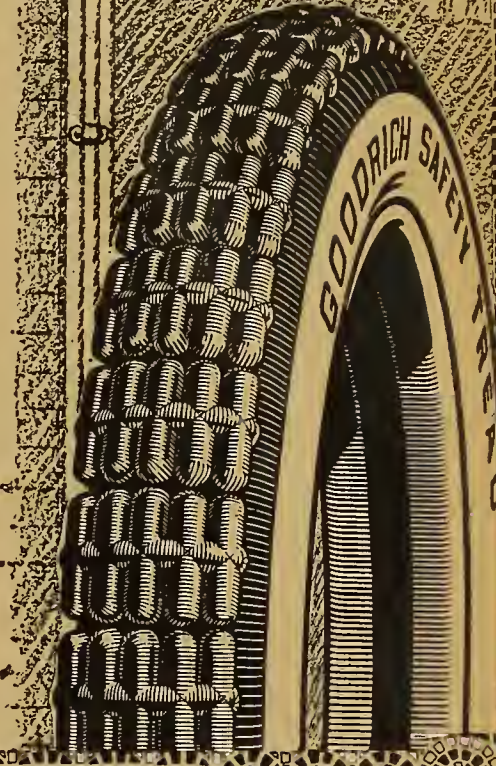
FAIR TREATMENT

Tires Good as Rain

GOODRICH SERVICE VALUE TIRES HARVEST MILES

Where You See This Sign Goodrich Tires are Stocked

Buy from Goodrich Dealers Located Everywhere



TIME was when a pneumatic tire meant luxury and pleasure to you men of the farm. To-day it spells quicker work, and more of it.

Hauling by automobile and motor truck make the tire a bigger and bigger item of expense in farming.

The hour has come for you farmers to reckon a real dollar-and-cent profit out of tires; just as from your ploughs and reapers; and count pleasure in them extra profit.

That is the Goodrich point of view, and Goodrich urges you to get profit by putting the speed, efficiency, and economy of Goodrich Tires into harvesting your crops and hauling them to market.

Nearly a half century of scientific and practical rubber making has built a maximum service in Goodrich tires for all road conditions.

Goodrich prestige and reputation for square dealing, the Goodrich name and brand guarantee their service, and farm experience has taught the value of a trustworthy name and brand.

Whatever tires you need for a small or large automobile, for your motor truck, motor cycle, or bicycle, the Goodrich trademark is your guide to dependability in tires.

A glance at the big, generous size of Goodrich Pneumatic Tires gives you confidence in them. Goodrich Truck Tires have outworn steel in actual work. Cut the cost of tire and hauling expenses on your farm with SERVICE VALUE TIRES.

THE B. F. GOODRICH RUBBER COMPANY

THE CITY OF GOODRICH · AKRON, OHIO.

"Charles M. Schwab Takes a Look into the Future"

—is the title of the most timely and most important article that has appeared in many a day. In it Mr. Schwab corrects the reports that have been current about his ideas of what is coming after the war—and deals with a lot of things as they exist right now. It is a clear and interesting statement of the man who is probably the foremost figure in the industrial world to-day. Samuel M. Felton, Director General of Military Railways; T. Coleman DuPont, the munitions magnate; Victor F. Lawson, publisher of The Chicago Daily News, are a few of the other powerful figures in America who will tell you some big important things. When men like these have something to say they say it through THE AMERICAN MAGAZINE. Schwab's remarkable forecast is

in THE AMERICAN MAGAZINE for September

Use Your Ford!

to

GRIND YOUR FEED
FILL YOUR SILO
SAW YOUR WOOD
SHELL YOUR CORN
PUMP YOUR WATER
ELEVATE YOUR GRAIN

(10)

Ward Work-a-Ford

Gives you a 12 h. p. engine for less than the cost of a 2 h. p. Ford builds the best engine in the world—it will outlast the car—and you might as well save your money and use it to do all your farm work. **No wear on tires or transmission.** Hooks up in 3 minutes. No permanent attachment to car. Cannot injure car or engine.

Friction Clutch Pulley on end of shaft. Ward Governor, run by fan belt, gives perfect control. **Money back if not satisfied.** Ask for circular and special price.

THE WARD CO., 2035 N St., Lincoln, Neb.

GET A WITTE "KERO-OIL" ENGINE

Money Back if Not Satisfied on My New 90-Day Engine Offer

Have More Power—Do your work easier—Get a better engine—**At less cost**—Make more money—Save more fuel—**Immediate Factory Shipment**—Five-Year Guarantee—90 Day Plan—Hundreds of Engines—2 to 30 H. P.—all styles—**Ready to Use**—Suit Yourself as to terms—Cash—or Payments—or

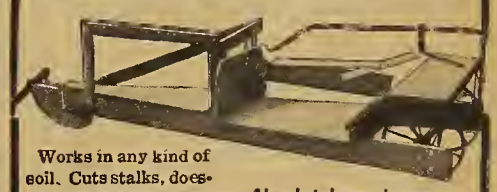
NO MONEY DOWN if arranged for. Write for latest book—(copyrighted)—"**How to Judge Engines**"—and latest wholesale factory prices—**Direct**. I ship everywhere in the U. S.—guarantee safe delivery—**Save You $15 to $200—make you the best price.** I can ship big engines—or small engines—**on wire orders.**—ED. H. WITTE, Pres.

WITTE ENGINE WORKS

2067 Oakland Ave., Kansas City, Mo.
2067 Empire Bldg. Pittsburgh, Pa.

The PERFECT CORN HARVESTER

Sold Direct $20.50 JUST the THING for SHOCK or SILO CUTTING



Works in any kind of soil. Cuts stalks, doesn't pull like other cutters. Absolutely no danger.

Cuts Four to Seven Acres a Day with 1 man and 1 horse. Here is what 1 farmer says:

Dear Sirs:—Your Perfect Corn Harvester absolutely has anything beat I ever saw. Cut 90 shocks, 12 hills, first day. I am sure I never invested money any more profitably in my life. My Harvester paid for itself in three days.

Respectfully, F. J. REDELMAN, Kouts, Ind.

SOLD DIRECT TO THE FARMER

Send for booklet and circulars telling all about this labor-saving machine; also testimonials of many users.

LOVE MANUFACTURING COMPANY
Dept. 27 Lincoln, Illinois

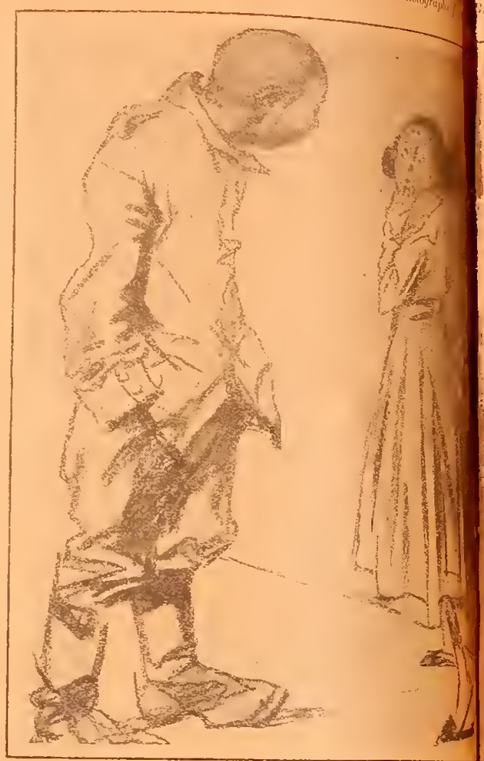
TYPICAL BOCHES

Drawn by L. Sachetti

Copyright by War Service Photographers Brothers, New York

THESE cartoons are taken from the famous collection of war cartoons by Italian artists, recently on view at Leicester Galleries, London. They are often called "the cartoons that brought Italy into the war." On the left we have a Hun officer instructing a private, "A good soldier is not a *good* soldier."

A CHARACTERISTIC group, as Mr. Sachetti sees them, of "Those who spread 'Kultur'."

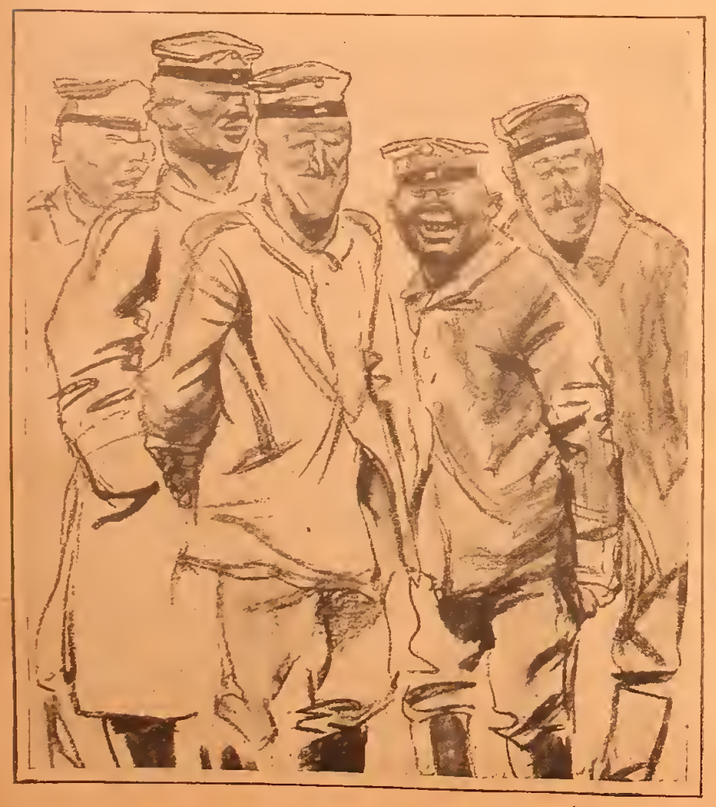


A Hun wolf stalking his prey—a Belgian lamb.

"The censor in Belgium" pictures the extreme yet characteristic steps taken by the Boche to silence news—killing the newsboy.

"A Boche." Need we say more? All the meaning of the term is shown in this drawing.

"WHY don't you teach the child German?" asks the Hun. And the Belgian replies, "It is unnecessary—he will lie soon enough."



THE Kamerad Step. It is understood that the renowned Goose Step no longer enjoys its old vogue in the German Army. The new favorite, the Kamerad Step, is not inferior to it in gracefulness, and includes some interesting play with the hands. Its features have been admirably caught by Mr. Sachetti.

We invite you to ride in a Hasslerized Ford

The Hassler Shock Absorber makes a marvelous change in the riding qualities of a Ford. It will give your car the smooth, easy, restful glide you associate only with high priced limousines.

Prove our claims. *Ride* in a Ford equipped with the

For FORD Cars — **HASSLER** PATENTED **Shock Absorber** — **For FORD Cars**

We will apply a set for ten days' free trial. At the end of that time we will remove the set without a question and without a cent of cost to you, if you say the word.

There's no obligation to buy tied onto this offer. If you've never ridden on Hasslers, have a set put on, even though now you don't think you want them. We will take the risk because *we know* what Hasslers do to a Ford.

Don't take some other fellow's word for this. Try Hasslers yourself. You will "try anything once,"—there is no risk or trouble in this offer for you.

Besides making your Ford ride like a $2,000 car, Hasslers save tires, gasoline, reduce up-keep one-third, and increase the resale value of your car. *Nearly a million of the Patented Hasslers now in use.*

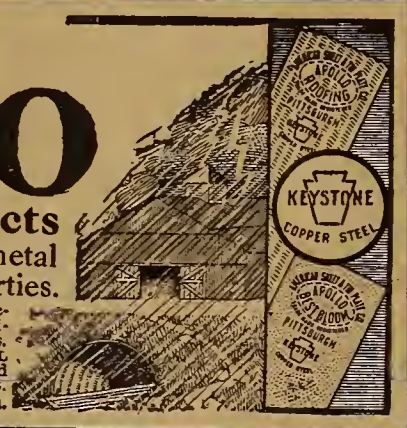
Write today—now—for Free Trial Blank and name of nearest dealer.

Robert H. Hassler, Inc., 1804 Spruce St., Indianapolis, Ind.

Apollo

Lightning proof— Weather proof— **Roofing Products**

For lasting service and fire protection use metal roofing—adapted to rural and city properties.



APOLLO-KEYSTONE Galvanized Sheets are carefully manufactured and highest in quality. Unequaled for Roofing, Siding, Culverts, Silos, and general sheet metal work. Sold by leading dealers. For fine residences and public buildings KEYSTONE COPPER STEEL Roofing Tin Plates are unexcelled. Look for the Keystone added below regular brands. Send for our "better buildings" booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

TEN THOUSAND— MOTOR MECHANICS NEEDED

YOU are needed at home and in France as men were never before. You are needed on Farm Tractors, Motor Trucks, Ambulances, Automobiles, and repairing Airplanes.

Big Money—See the World

Good motor mechanics can make all kinds of money now and get a job anywhere. Thousands are seizing this opportunity. You can do it—you can learn this business in a few weeks and be independent.

The Great Sweeney Auto School

The Million Dollar Sweeney Auto School has added another mammoth building with 200,000 feet of floor space. The newly added building is used exclusively for military mechanical training—the original building is still a commercial school. Here you are taught absolutely everything there is to know about motor mechanics and machines of all kinds, trucks, tractors, aviation motors, automobiles, ambulances, etc. You are equipped practically to fill any kind of a job and get the best salary that is paid.

Big Free Catalog—Write Today

Send for my beautifully illustrated Catalog, showing and explaining every department and feature of this wonderful school that has started thousands of young men on the road to success. Don't delay—act now because you are needed now.

Address **E. J. SWEENEY, Pres.,**

SWEENEY AUTO & TRACTOR SCHOOL

531 Union Station Plaza Kansas City, Mo.

What about two-part novels?

"Don't stop them," write *Woman's Home Companion* readers to the Editors. And the Editors do not intend to. Coming very soon are—

"White Man"
by George Agnew Chamberlain

"The Valley of Vision"
by Sarah Comstock

"Jilted"
by Fannie Heaslip Lea

"His Wife's Job"
by Grace Sartwell Mason

Each is a full book-length novel. Each is complete in *two* issues. No waiting in suspense! Each to sell later in book form for as much as $1.50—after you have read and enjoyed them in the

WOMAN'S HOME COMPANION

To Protect Bobwhite

By A. A. Jeffrey

EIGHTEEN bobwhite nests were found the past summer in the same Missouri meadow which had sheltered but five the previous summer, and all this, declares J. E. Roberts, on whose farm the census was taken, was the immediate result of neighborhood co-operation in protecting the quail during the past two seasons. Mr. Roberts and other members of the Sunnyside Farmers' Club started a campaign of quail protection which grew until quail-hunting was legally forbidden on 29 contiguous farms.

The notices announcing this action were plainly worded and legally effective, and were published for six weeks in the local

The quail's nest fairly overflows with eggs

newspapers during fall and early winter. Warning signs were also posted on the farms. The area covered was so great and the spirit of the farmers so earnest that the effect was real protection for this extremely useful farm bird. The Nimrods simply went elsewhere to hunt and the quails lived through the winter to breed in greater numbers than for many years previously.

Nor did the good effect cease there. So apparent was the benefit of the campaign that similar notices have since appeared in DeKalb County papers carrying 78 names instead of the original 29.

Squabs by the Ounce

By J. T. Raymond

SO MUCH per ounce is the pricing arrangement adopted by a Western squab raiser who sells his stuff direct to consumers. It obviously, he says, simplifies the arithmetic of selling, since the weight generally includes a fraction of a pound. Also, it has some psychological value in selling a product so costly as squabs. To the average shopper $4.98 is much less than two cents less than $5—merchandising experts have long recognized this idea.

So likewise five cents an ounce—the price this pigeon man is charging at present—doesn't affect the prospective customer

Well-bred and "scrub" roasters of same age fed alike. Which would you buy?

as does 80 cents a pound; doesn't begin to, he says. This man sells most of his squabs in a large city near which his farm is located, and by virtue of his selling method is enabled to laugh at higher grain prices and other disturbing problems in the squab industry. In reality, fat squabs at 80 cents the pound is little more expensive than fancy cuts of beef. The bird is practically all meat.

All over the Barn

3-in-One Oil helps to keep things just right and bright. Rubbed on harness

3-in-One

makes it soft, pliable and waterproof. Stops rotting and breaking.

Applied to harness mountings, bits, spurs, steel and nickel parts of vehicles, etc., 3-in-One prevents rust or tarnish and keeps them looking like new.

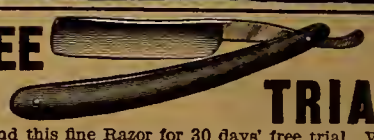
On horses' hoofs too, 3-in-One is a fine thing to use to overcome brittleness and to prevent cracking.

3-in-One lubricates all light mechanisms perfectly. Good for tools. The only gun oil. Stops automobile spring squeaks. Makes Fords crank easier when used on the commutator.

FREE—Send for FREE sample of 3-in-One and a booklet telling about its 79 labor-saving uses. Every farmer and every farmer's wife should have a copy of this book. Write for both book and sample now.

3-in-One is sold by all stores in bottles, 15c, 25c and 50c. In Handy Oil Cans, 25c.

Three-in-One Oil Company
165 LUG. Broadway, New York

FREE  **TRIAL**

Let us send this fine Razor for 30 days' free trial. When satisfied after using, send $1.85 or return razor. Order Today. **JONES MFG. CO., Dept. 943, CHICAGO, ILL.**

CASH for OLD FALSE TEETH Don't matter if broken. We pay up to $35.00 per set. Also actual value for diamonds, old gold, silver and platinum. Send by parcel post, and receive cash by return mail. Will return goods if price is unsatisfactory. Mazer's Tooth Specialty, Dept. 57, 2007 S. 5th St., Philadelphia, Pa.

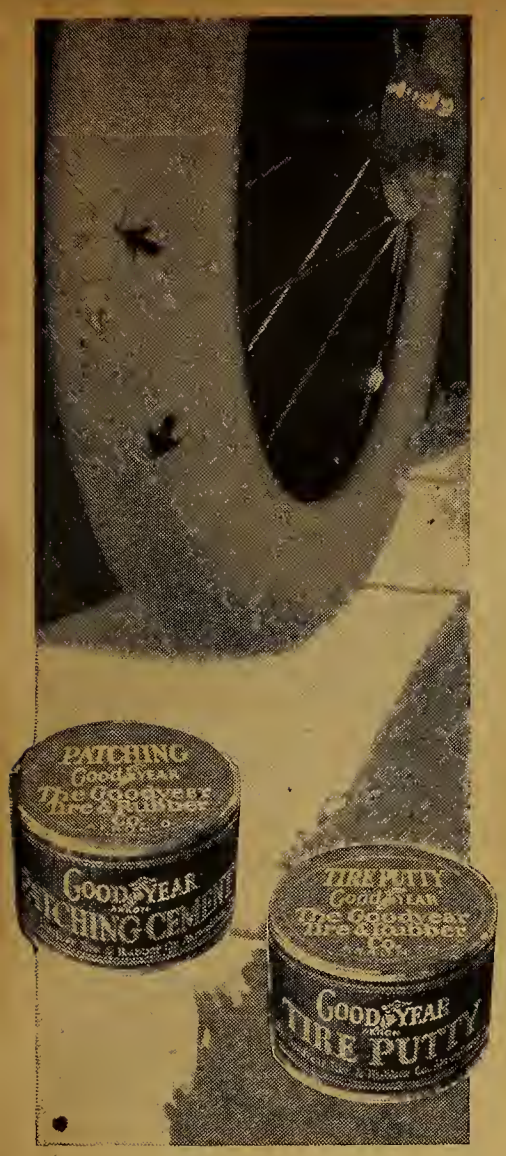
INSYDE TYRES Inner Armor for Auto Tires. Double mileage, prevent blowouts and punctures. Easily applied in any tire. Thousands sold. Details free. Agents wanted. **Amer. Accessories Co., Dept. 116, Cincinnati**

Rheims Cathedral

—that marvel of architectural art which has been consistently the target for the Hun's senseless fury of destruction! No heart but thrills at the name—it has become a rallying cry for the forces of democracy. In a coming number of *Woman's Home Companion* there will be a full-page reproduction of a famous painting of this great cathedral before its stately beauty was mutilated by the guns of Germany. Framed or unframed this art treasure will be well worth the keeping.

And the picture of Rheims Cathedral is only one of a number of other full-page reproductions of notable paintings—art treasures, which may be framed or passe-partouted for Christmas gifts—all in a single number of

WOMAN'S HOME COMPANION



Don't Let That Tread-Cut Ruin Your Tire

Fill it with Goodyear Tire Putty now, and save yourself money and mileage

THE neglected tread-cut is one of the most frequent sources of tire ruin. Small at the start, it grows swiftly if left uncared for, allows dirt and water to reach the carcass, greatly shortening the tire's life. Goodyear Tire Putty is a soft, pliable gum especially designed for the effective repair of tread-cuts and similar tire injuries. It dries quickly when applied, it is extremely resilient and elastic; it keeps foreign matter *out* of the tire and mileage *in*. Always have a can of Goodyear Tire Putty handy to use when your tires need it. It costs little and saves much. Remember the last thousand miles are the cheapest.

The Goodyear Tire-Saver Kit is an assortment of the most needed tire accessories handily arranged in a compact package. Your car should carry one.

GOODYEAR AKRON
TIRE SAVERS

Car Knowledge

By T. J. Harris

"PUT out your tongue," says the family doctor, and he takes a quick, sharp look. He slips his fingers on your pulse and a thermometer under your tongue. It is his diagnosis. He is getting the basic facts about your circulation, nervous system, and digestive organs.

The automobile mechanic does a similar thing to your car when you drive in with trouble. He tests out the engine and listens for the irregular heart beats of your car. He feels the radiator; if it is feverish it would indicate certain things. As a coated tongue is an index to a disordered digestive system, so are the foul spark plugs indicative of other carbon deposits in the engine. He tests out the spark with a screw driver and knows how the car's nervous system is. It is diagnosis again.

A man who finds out what is wrong with a car by a correct system of tests and eliminations, and then remedies the fault, is a mechanic. The man who guesses at trouble, takes a wrench and turns something, is a tinker, and will pay dearly for his pains in the long run. Stop and think when your engine dies. If certain things cause a motor to run, then the absence of one or more of these essentials will stop it. What makes an engine, anyhow? Why is a motor?

Three things, and no more than three, are essential to make a gasoline engine: It must have a vaporized fuel, usually gasoline; that vapor must be confined and compressed, and a spark must ignite this mixture. There can be but one result, and that is an explosion: force is liberated.

We want the engine to run continuously, to make its own fuel vapor, compress it, and touch it off with a spark at the time it needs more power. So we have the carburetor to mix the fuel with air. In its simplest state it is a vent allowing air to be sucked in with the gasoline.

The automobile allows quick trips for repairs

With the fuel vaporized, we must confine it. It must have openings to get into the combustion chamber, and places to get out after the explosion. That means valves. These valves must open and close at the right time, and that means a cam to lift and close them. The valves must fit tight or we have no compression. The cylinders must move freely, yet be able to hold gas under compression.

When it comes to electricity, we can either buy it in the form of batteries or make it with a magneto. The magneto is the cheapest if the engine is to be driven a great deal. By a system of coils and wires we lead the current to the spark plugs and let it jump across the gap and explode the charge. But there is another important thing that must be considered, for the spark must only jump across the points at a certain instant. It must not be continuous. So, to do their will, the engine designers make a switch to break the circuit, and when the charge is all mixed and compressed the cylinder coming over a certain position closes the switch and shoots the spark.

We surround the hot parts with water, making a simple radiator system, and in most cases we use a fan.

As we repeat a single explosion to a series of explosions, we can have more than one cylinder working to give us more power. But the rules for four and six cylinders are the same as for the single cylinder.

If you have a noise in your engine, what causes it? Will it ruin the motor to run it that way? Well, what are some of the things that it might be? Figure it out. Locate the source, and work from cause to effect.

Make the Most of Your "FORDSON"

Obtain the advantage of all the power available in your tractor. Don't limit its usefulness with inadequate tools. You cannot expect ordinary horse drawn implements to stand up and deliver the maximum of service.

To get the most from your "Fordson" use good tools—implements that are really designed and developed for the purpose. Such a tool is the

Roderick Lean

Light Automatic Engine Disc

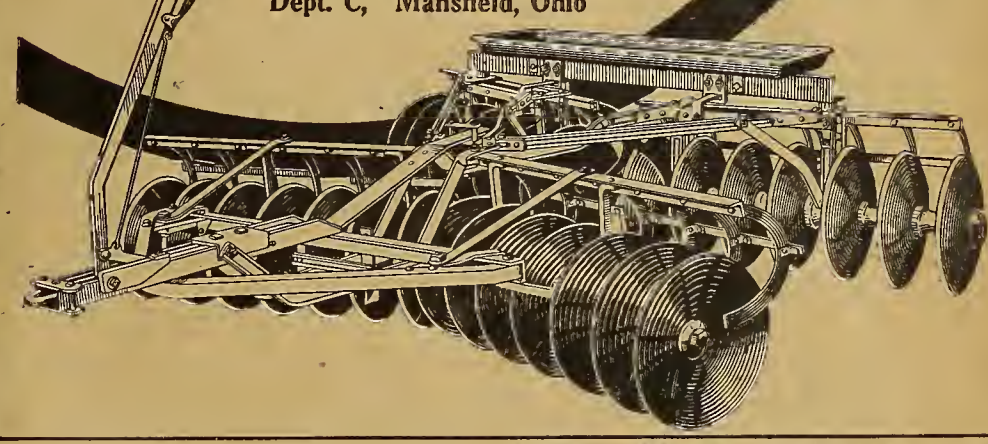
Long experience in power disc building and modern ideas are combined in this special harrow, which was perfected with the advice of the engineers and builders of the "Fordson" Tractor.

This is a one-man outfit, just like your power plow. Automatically adjusted from the tractor seat and gangs angled as desired to meet soil conditions by the draft of the engine. Flexible rear section and double draft bars are the same principles so successfully used in our famous heavier tractor discs. Turns short like a wagon without piling up soil or unnecessary strain.

Strong, sturdy construction throughout. Made for power work without unnecessary weight to make it heavy in draft. Furnished in 6 and 7 ft. sizes with 16 and 18 inch round or cutaway discs. Weight boxes for front and rear sections, disc scrapers, and everything complete.

See your "Fordson" Dealer or write us for prices, full information.

The Roderick Lean Mfg. Co.
Dept. C, Mansfield, Ohio



Your chance is in Canada. Rich lands and business opportunities offer you independence. Farm lands $11 to $30 an acre; irrigated lands $35 to $50. Twenty years to pay; $2,000 loan in improvements, or ready-made farms. Loan of livestock. Taxes average under twenty cents an acre; no taxes on improvements, personal property or livestock. Good markets, churches, schools, roads, telephones. Excellent climate—crops and livestock prove it. Special homeseekers' fare certificates. Write for free Booklets. Allan Cameron, General Superintendent Land Branch, Canadian Pacific Railway, 536 Ninth Avenue, Calgary, Alberta.

Why Hens Won't Lay

P. J. Kelly, the Minnesota Poultry Expert, 106 Kelly Bldg., Minneapolis, Minn., has published a book, "The Tale of a Lazy Hen." It tells why the hens won't lay and how to make them lay every day. Mr. Kelly will mail the book free to anyone who will write him.

LEPAGE'S GLUE HANDY TUBES
A HOUSEHOLD NECESSITY

$90 to $300 a Month

WANTED MEN!

To Learn **MOTOR MECHANICS**

To fill constant demand for trained men in all branches of the Automobile, Tractor, Motor Truck and Farm Power business. On account of labor shortage, opportunities never so great as now!

Learn Easily and Quickly in
RAHE'S PRACTICAL SCHOOL

—by daily work on real Autos, Motor Trucks, Tractors and Gas Engines, of all standard types. —Enormous equipment and scores of Master Mechanic Instructors make sure you will get what you come for.
—Only school that refers you to numerous Successful Graduates, right from your own section of the country. —No "extras" of any kind here—only additional cost to take **your** course at **Rahe's School** is difference in carfare.

Special To Drafted Men

Secretary of War says trained men "will be given mechanical opportunities." My "War Certificate" has enabled scores of men to pass into Motor Divisions for service behind the lines.

Write Today for 7-Day Trial Offer and Big 84-Page Book FREE

Also give age and present occupation

RAHE'S AUTO & TRACTOR SCHOOL "GREATEST IN THE WORLD"
2262 Oak Street Kansas City, Mo.

Dont Send a Penny

Just write stating size and width—that's all. We'll send the shoes promptly. We want you to see these shoes at our risk. Examine them, try them on—and then decide as to whether or not you wish to keep them. Our special bargain price is only $3.95 per pair while they last, delivery charges prepaid. We send them to you, not a cent in advance so that you can compare them with any $5.00 or $6.00 shoes. If you don't think this the biggest shoe bargain you can get anywhere, send the shoes back at our expense. You won't be out a cent.

Stylish and Durable

Made of genuine leather in gun metal, popular style ewing toe last. Blucher style. Comfortable, substantial, long wearing, genuine oak leather soles—reinforced shank end cap. Military heel. Best expert workmanship. Black only. Sizes 6 to 11.

Pay only **$3.95** on arrival. If on examination you don't find them the greatest shoe bargain of the year, return them and back goes your money. No obligation, no risk to you.

But you must send at once to be sure of getting them. A sale like this soon sells the stock.

SEND NOW

Just your request. No money now. Wait until they come. We ship them prepaid. Keep them only if satisfactory in every way. Be sure to give size and width. Send now while sale is on. Send no money.

Leonard-Morton & Co., Dept. 4010 Chicago

Do You Dread Getting Old?

IF YOU are 20 you probably do, but if you're 70 you probably don't. It is usually the situation we haven't met yet that we fear most.

A mighty interesting old man of 73—a friend of ours—tells us all about his fears at 20 and his contented happiness at three score and thirteen, in the October *American Magazine.*

The American Magazine is very glad to have the old man's views. But you have views on the subject too, no doubt; and the Editor would like to hear from you, whether you agree with the article or not.

Don't back away. There is no Throne Room nor any Royal Family of *American Magazine* contributors. It is a magazine of, for and by folks who are going somewhere, or have gotten somewhere, and can talk about it interestingly.

Aside from that, *The American Magazine* is full of human, living fiction about real individuals of all kinds; and pictures—also of real humans—of the sort you like to look at.

The Editor adds this word:

"Tell those *Farm and Fireside* folks to come and get acquainted with us on *The American Magazine* if they haven't already done so. Though most of them have. I think they'll find us interesting, and I know we'll find them so."

Yours truly,

The American MAGAZINE

Published by The Crowell Publishing Company
Also Publishers of
Farm and Fireside and the Woman's Home Companion

Moving Pictures at Mingo

By B. A. Aughinbaugh

The schoolhouse at Mingo gives the people a place for recreation and pleasure as well as for study and work

NOBODY ever thinks of the little red schoolhouse of yesterday in connection with moving pictures, nor have they anything in common. But the schoolhouses of to-day are much different. The Mingo centralized school located in Mingo, Champaign County, Ohio, is one of the latest buildings of its kind to take the place of a number of little red schoolhouses.

It was occupied for school work for the first time in the fall of 1917. Aside from the regular classrooms it has a spacious gymnasium and an auditorium which will seat 500 persons. In fact, it is an ideal community building as well as a well-equipped schoolhouse.

But there is something else connected with this building that has created more comment and wide-spread interest than the structure itself. It is the public picture show that is held in the auditorium every Friday night. This idea was inaugurated several months ago, and has met with such unusual and unexpected success that it will bear close investigation by other farm communities.

Now, Mingo does not differ in any way from thousands of other rural villages with a population of one or two hundred. The community is composed of farmers who own land in the vicinity and of a few storekeepers and clerks. The town is typically rural, and the people are not extravagantly rich, nor are they very poor.

The success of any entertainment must be judged in a large measure by the number of people that attend and the amount of money taken in at the box office. Popularity can be judged only in this way. In six months the community show at Mingo, operated by teachers and pupils without any outside help, has not only paid for the original equipment, but a second machine has been bought and a $700 player-piano placed in the auditorium. The picture show profits have paid for many other improvements installed in the building.

Every Friday night the whole community is gathered together for a social time. People come from many miles to see the Mingo pictures. The show consists of seven or eight reels. There is always one good feature film, such as is found at the high-class motion picture theaters. One educational reel is usually shown, and several reels of good, clean comedy. Occasionally screen lessons on stock raising or breeding or crop problems are shown, but these are in the main avoided.

The farmer, just the same as the tired city man who works in an office, hankers after relaxation, but in the past this recreation has been denied him. State farmers' institutes and similar meetings are held from time to time throughout the year, where talks on "shop" topics make up the entire program. These meetings are very necessary and instructive, and are doing a great work, but they don't get the farmer's mind off his job.

Recreation holds first place, and that's what they come for. Of course, if Bill Smith and John Jones get off to one side and start talking crops it is all right.

The simplicity of such a form of entertainment puts it within the reach of every farming community, and especially where there is a centralized school. Even the smallest villages have their own electric lighting systems, or, if not, are connected with high-tension wires of some kind. The necessary equipment consists of a machine, a galvanized or sheet-iron booth, and a screen on which to throw the pictures. A good white wall makes a good screen, and neither the machine or the booth is very expensive; an entertainment or two or a social will soon raise the necessary funds.

Incidentally the Mingo school has helped to put over every one of the drives on war-work subscriptions and Liberty loans. It also works in connection with farmers' institutes, and oftentimes reels are shown that have a bearing on the regular class-work of the school. The possibilities and advantages of such an organization are unlimited and, once realized, will continue to grow and expand.

The weekly picture show, held every Friday night in the auditorium, draws a big crowd

Individual Ensilage Cutter

By H. L. McGhee

I HAVE been operating an individual silage cutter for two seasons, and am very well pleased with it for several reasons.

First, it enables me to fill my silo exactly when the corn is ready and in best condition to be put in the silo. Nearly everyone who owns a silo knows that it is a very hard task to get it filled when the corn is ready. Aside from the inconvenience of having to wait on the machine, it means an actual loss in dollars to have to fill a few days before the corn is in the best condition. This year, on account of the scarcity of labor, many people will not be able to get machines in time to fill at all.

The silo may be filled without having the entire neighborhood to help and cause the women-folk extra work. The farmer does not need just to drop his regular routine of work and get up early and work late to get it filled with a cutter of his own. As it only takes a few hands, he can spare a man or two to carry on some other work that is just as important.

Last year, with labor so scarce and high, many men felt they could not afford to fill their silos, while we just went ahead and filled without any rush or worry about hands or any trouble to the women on the farm.

Such factors as these you can scarcely estimate in the saving of dollars and cents.

Another factor in saving by the use of

Disk plows do their best work on stubble

an individual cutter is that it enables the farmer to get his silo filled "clear to the roof" —a big thing to anyone who needs all the space possible. We filled our silo full, let it settle a day, refilled the space, and let it settle another half-day, then filled up the space again, gaining about five or six tons of silage.

After we were done filling our own silo, there were a number of neighbors who could not get machines, and we took the cutter out and filled four for neighbors in the community.

Here is a comparison of silos filled by a custom cutter and by an individual cutter. In this comparison, only costs on a 65-ton silo are available to compare with our own costs on filling a 45-ton silo. The dairyman who filled with the custom cutter was fortunate enough to get it filled at $1.50 an hour charged by the machine owner, while the prevailing price was 45 cents a ton, or $3 an hour. We will use the prevailing price in our comparison—45 cents a ton.

COST OF FILLING WITH INDIVIDUAL CUTTER

Two 1-horse wagons and drivers 2½ days	$12.50
One 2-horse wagon and driver 1½ days	9.00
Tramping (one man) 2½ days	5.00
Corn cutters (two) 2 days	8.00
Man to feed and attend engine 2½ days	5.00
Cost of oil (kerosene) 18 gallons at 14c	2.52
Lubricating oil, 1 gallon	.80
Interest charged to one job	3.00
Depreciation (we can figure that other silos filled more than pays it)	
Total cost of filling 45-ton silo	$45.82
Cost per ton	1.02

COST OF FILLING SILO WITH CUSTOM CUTTER

Five teams at $5 each	$25.00
Ten men at $2 each	20.00
65 tons at 45c per ton	29.25
Total cost	$74.25
Cost per ton	1.14

There is not much difference in actual outlay of money, but convenience counts for a great deal. The higher prices this fall will of course make a difference in these estimates.

The same sure power -belt or drawbar

Belt work is the *real* test of the flexibility of a tractor—when the load varies so from minute to minute—when the hand is not quick enough to regulate the fuel supply and internal temperature conditions.

As an OilPull owner recently put it, "The reputation of the Rumely OilPull on belt work is too well known to need any proving. I say, and every man I thresh for says, it has the closest regulation of any tractor or steam engine made."

On the Rumely OilPull the speed of the engine is *automatically* and *instantaneously* regulated by the governor to meet every condition in the load. It holds a thresher, or any belt machine, to its *correct speed all day long—no speeding up or slowing down as the load changes.*

It's just a case of the OilPull *automatically* manufacturing the right amount of power to meet every power demand. There's no waste—it's easier on the tractor and on the machine it's running.

It makes no difference whether your OilPull is on a drawbar job or belt work—she's there with the right power at the right time, and with plenty in reserve for the "pinches."

And you get that kind of power on kerosene or lower grade fuels—and *we guarantee it in writing.*

Three sizes, 14-28, 18-35 and 30-60 H. P. Write for the special OilPull catalogue.

ADVANCE-RUMELY THRESHER CO.
(Incorporated)
LAPORTE INDIANA

ADVANCE-RUMELY

This is Me

This isn't my face.
It's my name.
What's yours?
Speak right up.
Tell me who you are,
What you want, and how much.
If it's money—I'll show you how to get it.
That's my job.
I'll show you how to cash in on your spare minutes—hours—days—weeks—months.
I'll show you how to join The Cash-In Club.
Where spare time becomes spare dollars.
Whatta-ya-think-a-that!
Let's get together.
Use the coupon for a starter.
It's your move.

Jim Pepper
Secretary

This is Me

Mr. JIM PEPPER, *Secretary*
THE CASH-IN CLUB
FARM AND FIRESIDE
SPRINGFIELD, OHIO.

Here's my name. Tell me about The Cash-In Club. It's your move.

Name.....

St. Address.....

Town ..... *State*.....

Milk, Meat, or Butterfat

By Charles L. Richardson

I HAVE had certain experiences this last summer that have shown to me more fully the difference in the different breeds of cows.

Quite a few farmers in my neighborhood sell their milk by taking it to the railroad station and shipping it to the city each day. This summer a change was made in the shipping of the milk, so that it was impossible for these farmers to send their milk as usual, and the consequence was they had large quantities of it on their hands that they could not use until the shipping got straightened out, which took over a month. As I make butter, I contracted with one of my nearest neighbors to take his milk, and pay him according to the amount of butter that it produced. Rather than throw it away, he brought it to me night and morning, just after milking. He was receiving 50 cents a can of 8½ quarts from the milk

Cows need extra feed when the grass gets short

company in the city, but when I tested it I was surprised to find that one can of the milk he brought to me would make but one-half pound of butter. Now, as the local market price was 45 cents and I had agreed to pay him that, less 5 cents for each pound of butter that I could get from his milk, I found that to make butter his milk was worth only about one half as much as he could get when he sold it to the city dealer.

Now, his cows were of the breed that hold the world's record, if large quantities of milk are desired. It is also claimed that that same breed holds the largest butter-production record. The breed of cows that I am interested in do not give such big quantities of milk, but in proportion they give more butterfat. So I found from experience that if you wish to make the most money from cows and sell milk you ought to have cows from the breed that gives a large amount rather than the richest milk. On the other hand, if you desire to make butter or sell cream, it is a waste of time to milk cows that have quantity rather than quality or butterfat. Still, I know of many farmers that keep on losing because they do not realize that very thing.

A short while after I began to take the milk from the farmer I have mentioned above, I found that I had to put a large quantity of coloring in the cream when I made butter. I had to put as much as a dessertspoonful to each six pounds of butter that I made. I did not think anything of it particularly, as it was in the middle of the summer and the pastures were getting dry. But after he stopped bringing his milk I found that I did not need to use coloring when I made butter from the cream from my cows. While I made butter from cream of his cows the butter had a salvy, pale look to it, and did not "stand up" well. Which again proved to me that, while his breed was all right if one wanted to sell milk, for butter it was not so profitable.

After I had taken the milk to make butter from the butterfat it contained, there were at different times messes of cream that began to get sour before I was ready to ripen them for churning. I was puzzled at first, as I am always very particular about my temperatures; but on investigating I found that at times there were cans that had in the bottom of them rusty spots where the milk would stick, and consequently sour easily, especially if left standing for some time on a hot day. These are no doubt very hard to clean unless you are very particular, and these cans were very common, though the milk company was supposed to have nothing but the best.

Then I realized one of the difficulties that creameries have to put up with. They have to take cream in all sorts of conditions and still try to make good butter. And I also remembered what I had read many times, that there is no place where as good butter can be made as on the farm, where all of the conditions are under control of the buttermaker until the process is finished.

Our Peaches from Pits

By E. N. Piett

UNGRAFTED seedling peach trees have a poor reputation, the common belief being that the chances for getting valuable, high-quality fruit from seedling trees are little more than a lottery. But while this principle of reproduction has been proved true in the main, there are many important exceptions which have resulted in giving us some super-excellent new varieties of fruit, and my little adventure in peaches was gratifying proof of that fact to all our family, and neighbors as well.

Here is the story: Eight years ago, while traveling about the country, I saved the pits from a lot of the very finest and largest specimens of freestone peaches of different varieties that I could find. In making my selection, appearance as well as flavor was given consideration. The pits were carefully planted that fall, and the young seedlings were given good cultivation the following spring. When the seedling whips had grown to be about 18 inches tall, I stripped off all the leaves for 12 inches up from the ground. The following winter I protected the seedlings with a mulch of bean vines. The next April I transplanted twelve of the best looking seedlings to the rear of our city lot, providing deep, roomy holes to receive the roots so that but little cutting back was required. For some weeks thereafter I frequently watered the trees with a bucket of weak manure water for each tree. They grew by leaps and bounds. In June I pruned them to form the foundation for the future heads, and continued to give the trees intensive cultivation while taking care of the garden crops grown among them.

The trees received such pruning as they

One peach is a handful from this four-year-old seedling tree

required several times during each season, and to control the borers and other insects I kept the trunks painted with a strong solution of sulphur and lime applied with a brush, and also worked some of the solution below the ground level. All but two of the twelve trees lived and developed wonderfully. The fourth year after planting the 10 trees yielded four bushels of unusually fine peaches, many of the fruits weighing a half pound (and above) each.

Strange to say, there was not one inferior variety among the 10 trees. Four proved to be clings and six freestones. These trees have steadily increased in production, and now yield 40 to 50 bushels of superfine quality peaches from one year's crop. So I say, try a few seedlings even though you are planting grafted stock. You may get something new and better, as I did.

The Lure of the Letterhead

By A. L. Roat

AS I go about my own farming business and mix with other farmers, I am often at a loss to understand how so many energetic farm producers can hope to win success in their farm business when they make no attempt to advertise the products they have to sell. Every other important business industry lays as much stress on the advertising end as is placed on the producing end.

I will undertake to prove in almost any community that of two equally successful farm producers one is realizing a good return as a result of advertising, while the non-advertiser is barely breaking even or even experiencing actual loss.

My experience is that whenever I can market my crops "on the hoof" I stand a good chance of double profit—one from the growing of the crop and one from feeding it to the cattle, sheep, swine, or poultry to be marketed.

In particular my aim is always to keep my customers and prospective customers on the watch, interested, and eager for my different side lines before they are quite ready to put on the market. I bring this about by adding to my letterhead new items attractively displayed—for example: "Fat, juicy spring lamb, capons, squabs, next week," or whatever new I may have to offer.

As the holidays approach, the special business lures on my letterheads may be turkeys, geese, spareribs, roasts of beef and lamb, and bushel lots of fancy potatoes, vegetables, and fruits. This plan of advertising I find is a winner and low in cost, particularly where one is carrying on a direct-to-the-consumer trade.

A sprightly, well-printed letterhead kept full of new lures and surprises, and going to the best customers regularly, will bring results without fail.

I hardly need to add that such advertising will not sell inferior produce or win good results unless absolutely fair and square dealing backs up the good impression created by the publicity I have described.

Wooden Shoes for Horses

By Charles A. Byers

MUCH of California's midwinter crop of celery is grown in the peat lands of Orange County, California. The horses used in cultivating the land wear wooden shoes, to keep them from miring. They are shod all-around with slabs of wood, which are somewhat larger than the horse's hoof. The wood blocks are equipped with

clamps made from rod iron, and hence may be easily removed, as they always are when the day's labor in the fields is finished. The horses soon become accustomed to the strange shoes.

A Knock-Down Feeder

By Leo Matthews

SELF-FEEDERS have won a lasting place in farm practice during late years, both as time savers and as an aid in securing the best economic gains.

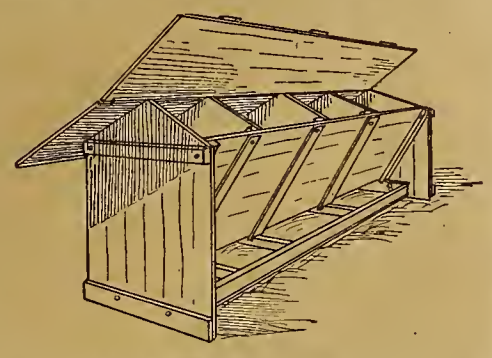
But the man on a rented farm is sometimes undecided as to who shall furnish the feeder, he or the landlord. Is a self-feeder an implement or a building? To solve this question for myself I designed a knock-down compartment feeder.

The feeder is 8 feet long between the ends, 5 feet high in the center, has a capacity of over 30 bushels, and feeds from both sides. A wide cover affords ample protection from the weather.

There are six principal parts to the feeder: A tray, two ends, two hopper sides, a cover, and as many partitions as one wishes.

The tray, which is 2x8 feet (outside dimensions), is held between the ends by four screw bolts. The hopper sides are 3 feet 9 inches wide by 8 feet long. These are cleated and held to the ends by bolts at the top, and at the bottom the cleats are notched into the tray. The ends are 3 feet wide at the side, 4 feet high, and at the center 5 feet. There should be at least one partition in the center to stay the sides from bulging. Each half of the cover measures 2 feet 9 inches wide by 10 feet long.

The material required is a good grade of matched flooring for the sides, partitions



of the tray, ends, and cover of the hopper. The bottom should be strong and durable, matched 1½ or 2 inch plank. The various parts of this knock-down hopper should be painted before it is put together.

Such a hopper is easily moved from one farm to another, which enables a renter to make use of this equipment when he otherwise might not be able to do so.

Beef on $200 Land

By J. A. Rickart

REGARDLESS of much contention to the contrary, Edward Douglas of Adair County, Iowa, has the figures and the cash to show that beef cattle can be raised at a fair profit on his land that is now worth considerably over a dollar a square rod for his entire farm of 240 acres.

Mr. Douglass maintains an average of about 80 head of high-grade Angus cows that are mated with high-quality, pure-bred Angus sires. His plan of feeding this huge herd is to keep 120 acres in blue grass pasture, 40 acres in hay, 40 in corn, and 40 in oats.

Eight cows are used for dairy purposes, their calves being distributed among some of the remaining heaviest milkers, which suckle two calves apiece.

Several brood sows and their litters take care of any grain and milk that would otherwise go to waste, thus adding the selling value of some 70 to 80 head of hogs to his annual farm income at small cost.

His young cattle are sold as stockers instead of buying corn to fatten them himself. The hogs are counted on to pay the major part of the operating expenses of the farm.

Making Heels Harmless

By E. A. Wendt

IF YOUR colt or horse has contracted the habit of kicking in harness, don't argue with him by words, whip, or severe treatment. A horse's satisfaction in kicking comes from having his heels land on something.

Instead of trying to conquer the kicker by force or coaxing, provide a set of thills about 10 feet in length, or so long that his heels cannot reach the vehicle, and so strong that he may lay on them as long as he finds it comfortable without damaging the thills. Bring on your kicker and fit him between the thills; have everything in harness and hitch absolutely unbreakable.

Drive him to this rig until he discovers that kicking gets him nothing except that tired feeling. The more intelligent the horse, the sooner he will become disgusted with kicking when he finds himself right where he began, and that he has not freed himself or caused you any inconvenience; also that he must begin all over or go to work. If he stands while kicking, it is well to encourage him to keep going.

Keep Your Liberty Bonds

HOLD to that bond. You invested to help send the boys across. They are over now, at grips with the German monster. You expect them to hold on—hold on till the last vestige of autocracy is crushed out of him. Then you, too, must hold on—must keep your enlisted dollars invested on the fighting line.

It isn't the hooray of a campaign that wins a war. It's the will to hang on, to make sacrifice today, that tomorrow may bring victory.

And your investment. Those bonds are the safest investment you ever made. Don't be lured into exchanging them for the "securities" of some suave get-rich-quick operator. Big returns may be promised but the bigger the promised returns the bigger the risk.

If you have to have money, take your bond to any bank and use it as collateral for a loan. There is no security the banker would rather have—nothing on which he will lend more willingly.

Don't use bonds to buy merchandise. The average merchant, accepting your bond in trade, sells them immediately, thus tending to lower their market price and taking away from the buyer of your bond the ability to lend a corresponding amount of money to his Government. Liberty Bonds are meant to help your country at War; are meant for investment and to provide an incentive for saving and a provision for the rainy day.

Hold fast to your Liberty Bonds. Hold fast for the sake of the boys "Over There." Hold fast because it is good business.

UNITED STATES TREASURY DEPARTMENT

Contributed through Division of Advertising

United States Gov't Committee on Public Information

This space contributed for the winning of the war by

American Telephone & Telegraph Company, New York

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has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil, preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load.

We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.

Write AERMOTOR CO., 2500 Twelfth St., Chicago

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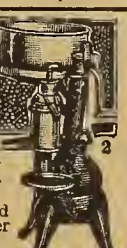

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will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. $2.50 a bottle delivered.

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who have horses shod to insist that the blacksmith uses Capewell nails. Better wearing, better holding, better hoof protection when shoes are put on with Capewell nails. The world's best nail at a fair price—not the cheapest regardless of quality. It will pay you to have the best.

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$3 Package guaranteed to give satisfaction or money back. $1 Package sufficient for ordinary cases.

MINERAL HEAVE REMEDY CO., 425 Fourth Ave., Pittsburgh, Pa.

Selling a Reputation for Good Butter

The story of a Kansas woman who created a market for home-made butter, and sold it at more than the retail price

By Alice Mary Kimball

OF ITSELF the prize cup representing the Kansas State butter-making championship might be considered a thriftless waste of silver. Hitched to a little business enterprise and selling ability, it has helped Mrs. George Downie to create a market of her own wherein she gets more than the retail price for every pound of country butter from her dairy.

The extra price represents not only what her customers in Topeka, Lyndon, and Emporia are willing to pay for what they consider a delicacy, but also what they are willing to pay for the certainity of getting it constantly. Their willingness extends even to the cost of shipping, which they pay also gladly.

Half her success, she believes, comes from washing the separator thoroughly twice a day

If Mr. and Mrs. Downie had heeded friendly advice eight years ago, when they bought a 60-acre run-down farm near Lyndon, Kansas, they would not now be running it as a successful business of which the dairy is a profitable department. To-day the 60 acres yield a larger net income than many Kansas farms of much greater area. In 1917 the profits, every item of expense and living deducted, were a few dollars short of $2,000.

Rotation of crops, deep plowing, and fertilization of the soil have increased the wheat yield from 17 to between 30 and 40 bushels an acre. The income from the dairy has jumped from almost zero to about $2.40 per cow per week.

For the success of the farm Mr. Downie gives his wife more than half the credit, and in turn Mrs. Downie gives much of the credit to the dairy.

Mrs. Downie is bookkeeper-in-chief of the firm. She can tell precisely what it costs to produce eggs, pork, butter, or wheat. She keeps track of the State Agricultural College doings, studies bulletins, and digs out nuggets of scientific knowledge which fatten the bank account. She looks after the poultry and the dairy. Her efforts have made the Downie farm widely known for the quality of its home-made butter.

Mrs. Downie holds—and sells—the state championship for home-made butter. Two successive years she has taken her butter to the exhibit of the Kansas State Dairy Association at Manhattan. Two successive years she has taken home the first prize silver cup.

The butter championship is strenuously contested in Kansas. Scores of farm wives and daughters pour a big voltage of Sunflower State energy into the perfection of the grain and flavor of their exhibition butter. The second time Mrs. Downie won the cup her closest rival was only a quarter of a point behind.

"When I sell butter direct to consumer," she said, "I make about 25 per cent more than by shipping butterfat to the creamery. I discovered there is a real demand for good country butter. Many people believe it has a sweeter, creamier flavor and more body than creamery butter; but the country butter on the market is likely to be poor butter, and the fear of getting an ill-flavored, unclean product lessens the demand and keeps prices down. If a farmer's wife expects to sell home-made butter she must work up an individual reputation for cleanliness and quality. Otherwise she will do far better to sell butterfat to the creamery."

When Mrs. Downie won her first prize her dairy consisted of five cows—grade Guernseys and Jerseys. The Downie dairy began the summer of 1918 with ten cows.

Anybody, Mrs. Downie says, with sufficient care and practice, can make as good butter as she does.

She and her husband co-operate to make sure of the cleanliness, which is the first essential of good butter. Mr. Downie looks after conditions at the barn. The bodies of the cows are kept clean. Long hairs are clipped from the flanks so that accumulations of filth will not drop into the milk and create undesirable flavors. Clean clothes and clean hands always are brought to the milking. The udder of each cow is wiped with a damp cloth before milking. The stable is kept free from dirt and manure, and the floors are well drained as a safeguard against odors.

After Mr. Downie has done his utmost for cleanliness Mrs. Downie takes up the work. Half her success, she believes, comes from washing the separator thoroughly twice a day.

"Continuous vigilance is the price of good butter," she insists. "You can't get a delicious flavor if you wash the separator only once a day. I've tried both ways, and I know. I wash the separator every time it is used and scald it with soda and wipe every particle of dust from the woodwork with a separate cloth."

She is equally particular with all milk utensils. All are rinsed in lukewarm water after being washed thoroughly with soap or cleaning powder and water as hot as her hands will bear. Then they are scalded and boiled out five minutes with soda, and finally exposed to the sunlight for two or three hours.

Mrs. Downie ripens her cream in a light, well-ventilated milk-room with a temperature of about 50 degrees. The door is kept carefully closed because odors from the kitchen or from fruits and vegetables might easily be absorbed in the cream. The ripening cream is stirred frequently to insure uniformity of flavor and aroma, and to prevent the accumulation of small bits of clabber which would hurt the quality of the butter.

When it has thickened slightly and presents a smooth, glossy appearance, it is poured into an old-fashioned dash churn and coloring added. The mass is churned until the butter appears in tiny granules about the size of a small pea. Buttermilk is then drawn off and the butter is washed three times in clear cold water and salted.

Most country butter is badly overworked, Mrs. Downie believes. The purpose of working butter is to distribute the salt evenly, to produce a compact, firm body, and to eliminate moisture; but too much working ruins its quality by spoiling the grain. A mottled appearance and a gritty taste, on the other hand, indicate too little working, with its consequent uneven distribution of salt.

In summer Mrs. Downie keeps her cream in the well and uses ice in churning. A two or three pound piece of ice, carefully rinsed, is broken in small pieces and placed in the five gallon churn just before churning. Afterward the butter is washed in ice water.

The old-fashioned vender of country butter marketed his product in tubs or in big rolls wrapped in not too clean linen. Mrs. Downie uses a pound print which stamps "Downie Farm" on every piece. Each pound is wrapped in parchment paper and slipped into a neat pasteboard carton.

"I intend to keep on exhibiting butter—and winning prizes if I am lucky," said Mrs. Downie. "The public easily forgets, and advertising value may be lost if impressions are not repeated. I want to keep the idea of clean, well-flavored, nicely wrapped butter associated with our farm."

Mrs. Downie doesn't think of returns from the dairy as "pin-money," to which she has an especial right. "The time is past," she says, "when allowing the 'butter and egg money' to the wife may be considered a wise division of the farm profits.

"When two men have a partnership, it isn't usual for one of them to carry on a side line to earn personal spending money," she explains. "I find it more business-like to bank the income from the chickens and from butter sales, and to check out from the general funds whenever I need to. I carry my own checkbook and have a comfortable sense of economic independence.

"My husband and I confer before making expenditures for household improvements or for farm machinery. We try to keep a wise balance between the two, and to keep the home as up-to-date as the farm. We need a silo, but we remodeled our home first. One must have comfort as one goes along, and a pleasant home is a help to happiness and efficiency. It makes the day-by-day struggle seem worth while. We brought water to the kitchen and expect soon to install a bathroom.

"Anything which releases energy from mechanical household routine and sets it free for the more profitable and creative lines of farm activity is, we figure, good economy."

Mrs. Downie uses a pound print which stamps "Downie Farm" on every piece

A Profitable By-Product

By Alice M. Norton

THE butter maker, having a regular supply of skim milk, can add to his profits if he will market it in the form of cottage cheese. Just now this is a patriotic as well as an economical step, as cottage cheese is one of the meat substitutes highly recommended by the U. S. Food Administration.

There is even a greater demand for this product in the city markets than formerly, and a very substantial trade could easily be built up. If there is unsold cottage cheese on the market, it is not because of lack of demand, but because of its inferiority. City people are always glad to buy it if it is of good quality.

The making of cottage cheese is comparatively simple, but care must be exercised in heating the milk to obtain a product of soft consistency. This method, recommended by many cheese makers, gives excellent results:

The milk is set aside to sour. When it has soured enough to form a clabber it is placed in pans on the upper grate in a moderately warm oven, and the temperature gradually brought to between 90 and 95 degrees Fahrenheit. A temperature above this is avoided, as the curd becomes hard and tough. The oven door is left open during the process.

Stir the mass occasionally, and when it feels warm remove from the oven and allow it to cool. If the milk is thoroughly cooled before the whey is drained off, it retains more of the fats than if this is done when warm. When cold, pour the clabber into coarse cheesecloth bags and hang up to drain.

The process of curdling is sometimes hastened by setting the milk in a pan of warm water, or by pouring hot water directly into the milk itself. The effect of the latter, however, is to remove much more of the acid than when the whey is left undiluted.

Though cottage cheese is usually made by allowing the milk to sour naturally, it is sometimes more convenient to curdle the milk by adding rennet. Some housekeepers have a preference for cottage cheese thus made since the flavor is milder and the acid taste which it possesses when made from sour milk is lacking.

When the curd has been drained it is ready to mix with milk and cream to the consistency desired. A smooth, velvety product is secured by working the curd through a small fruit press before mixing.

Chopped parsley or olives, caraway seeds, and pimento may be used for flavoring if such cheese is preferred to the plain cottage cheese.

A Watermelon Party

By Emily Rose Burt

WHEN watermelons were ripe and plentiful, big pink posters, cut oval with a painted border of green and black lettering on the pink, startled the village with the notice of a watermelon party. They read:

Do you like watermelons?
Anyway
Be sure to come to a watermelon party
on the local fair grounds
next Tuesday evening
Admission 25 cents
This entitles you to see the minstrel show
Proceeds for the Epworth League
of —— Church

Long plank tables on wooden horses were improvised for serving the watermelons, which were contributed by the members of the society. Some of the men acted as carvers of the melons; and the girls served the portions, which were sold for ten cents each.

The grounds were lighted with strings of electric lights in pink and green paper lanterns.

Besides the main attraction there were several booths and side shows, arranged country-fair fashion, which drew well. One was labeled "the watermelon patch." For this, real watermelon vines had been obtained from somebody's garden and placed naturally on the ground. To the vines were tied any number of artificial melons made of green paper stuffed with cotton wadding which concealed tiny favors.

On payment of ten cents any person had the privilege of picking a melon. The prize inside was supposed to be worth the fee.

One booth which attracted attention was the "Guessing Booth." The equipment consisted of scales, a tape measure, and watermelons of all sizes and shapes, large ones and small ones, round ones and long ones. Each customer was charged five cents for a guess on the weight and on the circumference of a melon. If his weight guess came within a quarter of a pound or his circumference guess within a quarter of an inch of being correct, his reward was the melon itself.

The "Limerick Booth" was popular, and called to the front the poetic geniuses of the village. Each person was invited to write a limerick about a watermelon. These were handed in to be read by the judges, and at the end of the evening the prize, a huge melon, was awarded to the writer of the cleverest verse.

At another booth "watermelon cake" was served at five cents a slice. The secret of this was that in making a plain cake the batter had been colored with pink sugar and sprinkled with raisins. The cake was then baked in a round tin, and when sliced resembled the pink of watermelon filled with black seeds.

As it was sweet-corn season, there was a hot corn vender who sold steaming ears straight from kettle to buyer.

One feature of the evening was a watermelon contest among the boys. Volunteers were called for, and lined up at a table. They were then supplied with large wedges of melon, and at the sound of the referee's whistle the race began.

The prize for the winner was a whole watermelon.

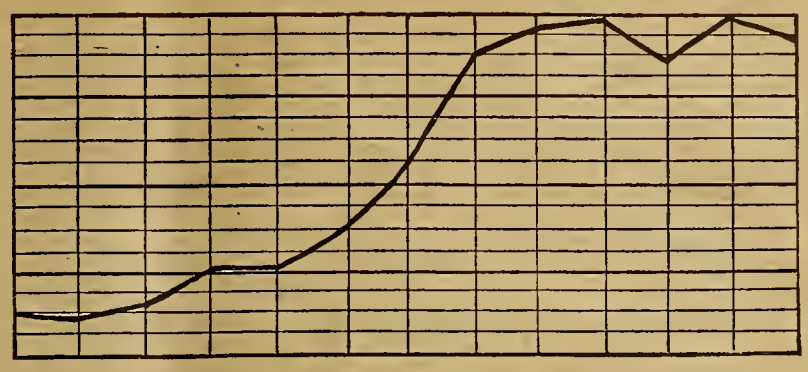
There was also a watermelon hurdle race. The course was laid out with big watermelons, and time was kept for each hurdler.

The main attraction of the evening, however, was the minstrel show. On a raised wooden platform sat the performers with blackened hands and faces. They wore grotesque garb, and each one fingered a guitar, mandolin, or banjo.

First they gave a number of well-known Southern melodies, such as Old Black Joe; Suwanee River; Dixie; Massa's in de Cold, Cold Ground. Some whistling numbers were much appreciated, and My Alabama Coon, with its humming and strumming, proved a great success. As a special item of the musical program they sang a parody of When It's Apple Blossom Time in Normandy, called When It's Watermelon Time in Dixie.

The watermelon party was a great success, and is recommended to any organization in town or country at watermelon time as a fun- and funds-producing social.

NOTE:—Words of the parody "It's Watermelon Time in Dixie" and the address of a firm which supplies material for minstrel shows will be sent on receipt of a stamped self-addressed envelope by the Entertainment Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York City.



Why live stock prices go up and down

WHEN there is more dressed meat on the market than there is consumer demand for it, meat and live stock prices go down.

But when the consumer demand for meat is greater than the supply, meat and live stock prices go up.

This is the law of supply and demand. It is the law that determines the prices the producer gets for his cattle.

* * * *

Between the producer of live stock on one hand and the consumer of dressed meat on the other hand is the service of the packer.

The packer turns the live stock into dressed meat and by-products and then distributes them to the retailer.

Out of every dollar the packer receives for this meat and by-products he pays 90 cents, approximately, for the cattle.

The remaining 10 cents on the dollar must pay for dressing, freight to market, operation of distributing houses, and in most cases delivery to the retailer.

Out of what is left must come the packer's profit. For Swift & Company during 1917 this amounted to a net profit of ¼ of a cent per pound of beef. On *all* products, it was only a little over half a cent per pound.

A reasonable profit margin is necessary to enable the packer to operate without endangering the efficiency of the business and its value to the producer as a marketing agency for live stock. Complete elimination of these profits would have practically no effect on the farm prices of live stock nor the retail prices of meat.

Swift & Company will gladly co-operate in the carrying out of any national policy that will tend to steady the prices of live stock and meat.

Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders

Back to Boyhood for Awhile!

BACK to that thrilling, adventurous, fearless, love-sick, man-making period of your boy life between the ages of 12 and 20! That's where BOOTH TARKINGTON'S big new serial novel will take you.

It opens with funny farcical episodes of Ramsey's boyhood; shifts to the mingled comedy and romance of youth; flows on into joyous young manhood. With sympathy and understanding the author tells of the loves and adventures of the years from 12 to 20. You see, with glowing delight, Ramsey Milholland, changing, growing, unconscious of it all at first, then becoming aware of himself and the world about; both are strange through his new eyes; common incidents take on a romantic gleam. Then out in the world, the world of college, the drama of his new freedom unfolds, told with shrewd humor. You see yourself here and there in his actions and ideas. You are explained to yourself by a master, with kindly humorous touch.

In the midst of the story the war comes to the college. There is a wonderful narrative of the increasing effect upon young men and women; until finally full realization comes; the spirit of youth bursts into a patriotic flame.

This story is somehow a personal thing—it is *told* to you. It is as if you were the only one the writer, with all his genius, were speaking to. Call it "Six Evenings with Booth Tarkington." You sit down with the magazine and presto, change—! There is "Tark" (as his friends call him) sitting right over there. In his own rich, wise, humorous way he begins to tell you, with twinkling eyes, the story of Ramsey Milholland—one of your kind, one of his kind—*from the inside out!* You're going to have many good times this winter—with Tarkington's best story. Watch for this wonderful new novel in

The American Magazine

Make Your Tableware Gleam Like New

IF your tableware and silver are new, always use 20 Mule Team Borax when washing them. If they have seen service, Borax will quickly bring back the original lustre. Removes grease, dirt and dullness almost instantly.

20 MULE TEAM BORAX

will also give your glassware a wonderful lustre. Cleans pots, pans and kettles perfectly, without scraping. And keeps them sanitary as well as shining because the Borax is mildly antiseptic.

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300 candle power light. Rainproof, windproof. Can't explode. Used by farmers, teamsters, hucksters, miners, plumbers, etc. Biggest money maker ever offered to agents. No competition. New. Patented. Easy Seller. Big Profits. Write quick for agency.

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Always Your Companion

—now a necessity

No woman can afford to be without the *Woman's Home Companion* now.

It is not a luxury—but an absolutely indispensable part of the household equipment. Everything is costing more during these war times, but the *Woman's Home Companion* helps you to save on every single item of personal and household expenditure. And the *Companion* costs no more—if you order now—before September 30th—before the price increases.

WOMAN'S HOME COMPANION

To Cut Clothes Cost

By Emma G. Wallace

EVERY woman likes pretty clothes, and it is not necessary to spend a lot of money to have them, either. A little ingenuity and the use of spare minutes will work wonders.

Now that we are all trying to effect war-time economies it is an excellent time to go over our rolls of pieces and out-of-date garments. Very often a skirt is somewhat worn or no longer in usuable form, and yet it may be combined with something else or used as it is and a child's dress or serviceable waist made out of the breadths.

Rip the article and, if necessary, wash and press it. It is surprising what a little soap and water and a hot iron will do. If the goods are streaked or faded, a package of dye at a few cents will renew or change the color. Sometimes all that is necessary is to make a very strong rinsing water of the dye, and to use this. At other times it is better to put the cloth into a dye bath. Never put dry woolen goods into hot dye, or it will cause it to wrinkle and cockle.

If the material is inclined to be worn and thin, use an all-over foundation lining of muslin. A muslin dress which is faded or even partly worn will answer every purpose, and will make the outside material look richer and wear better.

Discarded trimmings often represent a good deal of money in the original outlay, and while rusty are yet fairly good. These can be dipped in the same dye. For instance, some banding of cream lace was used to trim a navy blue waist. The navy blue waist had a freshening bath in blue dye and the banding was dipped at the same time. In order to freshen it up, the resourceful young woman who made it embroidered a figure in the lace in soft old rose and green. This gave just the touch of color needed to brighten up the garment, and was the work of only an afternoon.

Beads are again very popular, and almost everyone has a bundle of old passementerie or bead trimming somewhere stored away. Get this out, cut off the beads and perhaps buy a few others which will blend with them. It is most fascinating work to bead a collar or waist. An old-rose waist was recently beaded in steel and copper colored beads with rose tints. There was a pointed collar in front, and each point was held in place by a little bead tassel.

Many girls and women are now taking courses in home dressmaking, either from a local seamstress or by correspondence, so that they may do their own sewing in an expert manner. It is certain that attractive materials may often be picked up at bargain prices if the dressmaker knows how to use them.

Clover-Leaf Collar

COMPLETE directions for this pretty filet crochet design may be obtained by sending four cents in stamps to the Fancy-Work Editor, FARM AND FIRESIDE, Springfield, Ohio. Order No. FC-108.

lemon and parsley. Just before taking to the table I sprinkle it with lemon juice.

I find that this method of cooking makes an otherwise dry fish into a very palatable one.

I never waste the scraps of cold fish left over from our meatless day, but by addi condiments and sauces to them I usua achieve a dish that brings praise from members of the family.

One day I had just enough halibut stea left to make two cups of the flaked fish. made a white sauce of two tablespoo oleomargarine, two and one-half tabl spoons cornstarch, one cup milk, on fourth teaspoon salt, one eighth teaspo pepper, and one teaspoon onion juice.

After lining the bottom of a grea baking dish with a layer of fish, then layer of white sauce, a layer of fish, and on until all the fish was used, I covered t top with buttered crumbs, using one-h cup bread crumbs and one-half tablespo butter, and placed in a hot oven u crumbs were brown.

I served this as the meat dish at a dinn for six people, and at the rate it disappear I had no qualms conscience that sometimes have serving left-ove for dinner.

Another ti there was ju about a cup a half of fla baked catfish le So this time I ma a little thic white sauce of t tablespoons o margarine, th tablespoons co starch, one c milk, one-four teaspoon salt, a one-eighth te spoon pepper.

I added the fi to the white sau then allowed t mixture to co When cool, shaped into cr quettes, rolled cornmeal, the melted ba grease and put i a hot oven. O margarine may used if the ba grease is not av able.

I never fry cr quettes in deep f but instead them in the melt fat, or put lumps of fat on top and ba They are just as palatable, and by so d I am conserving fat, for there is more wasted in deep fat frying than in any oth way.

Salmon is another fish that is of wasted. The flavor of salmon is sligh strong, so in the left-over dishes in whic use it I usually add as much dried bre crumbs as salmon. For instance, one nig unexpected company dropped in just dinner-time. We had planned to ha steamed rice with milk and honey as t main dish for our simple meal, but as t is not a company dish I racked my br for a quickly prepared appetizing dis serve.

Then I hit upon the idea of salmon in cases, for there was about a cup and half of cold salmon in the pantry, and t is the dish which I developed from the l over:

I lined eight ramekins with the wa steamed rice and then filled the cen with a mixture of one and one-half cu flaked salmon, one and one-half c grated bread crumbs, salt, pepper, juice of half a lemon. Then I covered t tops with the steamed rice, pressing down rather firmly, and steamed for ab twenty minutes. I served these turned on a large platter, garnished with le and parsley. They made very attracti looking molds.

There are countless other ways for usi the cold fish, as by adding salad dressi chopped olives or nuts, and parsley. U this either as a sandwich filling, served a lettuce leaf as a salad, or combined wit eggs in omelets. It is also delicious whe served with potatoes in hash.

Tasty Fish Dishes

By Dorothy H. Evans

I FOUND it very hard to substitute fish in our menus until I cooked a halibut steak with lemon juice and cornmeal batter. But now there is no complaint when this is substituted for the usual T-bone steak.

I always buy halibut steak in one-inch to two-inch slices and wipe it off with a damp cloth and drench it with lemon juice when it is first delivered. Just before putting it into the oven I spread on a thick batter of flour, salt, pepper, cornmeal, and water, to which one level tablespoonful of melted shortening has been added.

I bake from thirty to forty-five minutes, depending on the size of the steak.

It is served on a platter garnished with

Dulcie Decrees

Following her plan of being as disagreeable as possible, the cigar girl criticizes her cavalier's former sweetheart with desired results

By Elva Sawyer Cureton

PART II

DULCIE looked. The girl had a wistful, appealing kind of prettiness—the beauty of youth and health. She would undoubtedly grow to resemble her stout, putty-featured mother; her whole heart and soul would probably become tied to her kitchen.

"Pretty—after a fashion," she observed in a derogatory tone. "No character, though."

"I don't see that!" There was a slight acerbity in the young man's voice.

Dulcie raised her eyebrows.

"If she'd had any gumption she'd have married you, parents or no parents," she returned. "To refuse to elope—"

"No one ever asked her to elope," he cut in with exasperation.

"Oh!" She raised her eyebrows disagreeably and patted her lips delicately to suppress a yawn.

They sat down on the sand at some distance from the crowd, but still in sight of it. Dulcie professed herself too weary to go to their cove.

The sun was obscured by a slight mist and the gray-green waves broke in even, listless lines of foam, keeping up an interminable, witless advance and retreat, losing ground slowly but steadily.

Dulcie made no attempt to be entertaining. When Norval launched himself into the fascinating "I" she was inattentive and unresponsive. She yawned openly several times. Once she broke in to ask him how old he was, and when he said twenty-four she feigned surprise at his maturity.

"And pray, how old are you?" he challenged.

"Oh, heaps older than that," she returned as if she were years his senior. As a matter of fact, she had exactly one year and three months the advantage, if age can ever be said to be an advantage to a woman.

The next day and the next she gave him all of her society that she could. She demanded entertainment and refused to be entertained. She objected to the color of his shoes—she thought tan made a man's foot look so huge and shapeless. Norval wriggled and tried to cover his feet with sand. The sand got inside and he became snappy and irritable. Dulcie told him he acted like a horrid, disgusting little beast of a boy. She detested immaturity, it seemed. It was so raw and uncouth. She even went so far as to say that the illimitable conceit of boys in general gave her a pain.

After this, personal reminiscences waned; the conversation dwindled and died, after a few spasmodic, desperate kicks. They were thrown back upon the waves for amusement. Dulcie watched the ugly, creepy, sneaky little traitors crawl up the beach, spew their white spume upon it, and slink back with soul-deadening monotony. The sun refused to shine. One saw life as it really was—a pitiful, dishonest little fight against overwhelming odds. From the expression of his youthful face this was one subject upon which her companion and she were heartily agreed.

Then Dora came toward them along the sand, a young man in white flannels at her side. Norval stiffened, but did not move. The girl caught sight of him, hesitated a frightened moment, then smiled her wistful little smile as she bowed. She looked as if she wanted to speak, but catching sight of Dulcie's mocking eyes she blushed and hastened by.

"Bread and butter and molasses," murmured Dulcie to a seagull circling overhead.

"I *wish* you'd stop your everlasting slams," Norval said irritably. "They're in mighty poor taste, let me tell you."

"Oh, I'm in poor taste myself," Dulcie replied cheerfully. "I'm no Lady Madeline Montrevor masquerading as a shawp-guyrl. I'm the real, real thing. My mother did janitor work in an office building, and my father—no, I guess poppa was a gent. He didn't work, not he! He was a spender and a borrower—say, he could borrow the buckles off your suspenders and have you saying thank you at that. I remember—"

"Oh, shut up!" interrupted Norval rudely. "I don't want to hear about your antecedents."

"Well, when they're yours you'll have to. Poor mother—mother's all right," she defended, forgetting her rôle. "I'm not ashamed of her. But poppa—you'll get your fill of him. The dream of his life is to have a rich son-in-law."

The young man who was slated for that unattractive part fidgeted impatiently.

"You can make the prospect look about as cheerful as a job in a cannery," he burst out petulantly. "Why aren't you ever cheerful any more?"

"Or interesting?" she questioned calmly.

"Or interesting," he corroborated savagely.

"I am—to some people. You've seen me play all my cards—even the joker's out. Don't you like the stack-up?"

"I wish you'd use more refined metaphors," he returned, ignoring the question.

"What is a metaphor—a new kind of rouge or a patent shoe-polish?"

"It's—oh, what's the use?" He rose to his feet. "Come on," he ordered, without offering her his hand. "Let's move."

Norval jabbed his stick upright in the sand and turned to her in uncontrollable exasperation. "Are we engaged, or aren't we?"

There was a wicked little gleam of satisfaction in Dulcie's eye as she rose and followed her sulky cavalier toward the Casino. She took pains to be at her desk before the arrival of the 5.30 train.

And she had her reward. At 5.45 a tall, stoutish woman, packed in black satin, approached the counter with her small searching eyes fixed on the girl behind it. She was followed by a fussy old gentleman many years her senior, who made short, explosive little ejaculations as effective as a toy pistol.

The lady registered Mrs. J. G. R. Whitlaw and husband. She turned the book around for Dulcie to read, but that astute young woman already knew with whom she had to deal.

"When can I have a private talk with you?" asked Mrs. Whitlaw when her identity had had time to sink in.

"I'm off from eight to nine," invented Dulcie on the spot.

"Would you be so kind as to come up to our rooms?"

What Has Gone Before

NORVAL WHITLAW arrives at the Breakers, summer hotel, quite downcast because his parents refuse to consent to his marriage with Dora. He meets Dulcie, the cigar girl, and she, recognizing his lovelorn state, endeavors to cheer him up. He falls in love with Dulcie and demands that she promise to marry him, to which she replies that she will some time, if he insists, but determines that she will make herself so disagreeable that he will not insist. Norval tells her that he has written his parents that he is going to marry the cigar girl at the hotel, and Dulcie guesses rightly that the letter will bring his mother to the scene, so she prepares for the interview. She starts her campaign when Norval points out his former sweetheart to her.

"Pleased, I'm sure," murmured Dulcie.

She was glad to see that Mrs. Whitlaw was alone when she entered the room shortly after eight. Mrs. Whitlaw's first words made Dulcie smile at Norval's claim that his mother hadn't the backbone to oppose his father. They showed a common sense she had not expected.

"Are you going to marry my son?"

Dulcie looked at her squarely.

"That depends," she answered.

"His father won't disinherit him, if that's what you mean. After all, he's our only child, as you doubtless know."

"That isn't what I mean at all." The color had risen in Dulcie's face and something in her expression made the other woman wince. It was as if she had stabbed a creature already in a trap.

"I'm sorry," she said contritely. "Will—won't you explain?"

"Just why did you break off the match with Miss—Dora?" asked Dulcie.

"The girl's a brainless little fool, and we had other plans." Mrs. Whitlaw threw up her head haughtily. "There's nothing objectionable about the girl, but Norval has a right to look higher. It was merely a passing fancy—how ephemeral even I didn't realize," she added with a touch of bitterness.

"You don't quite understand boys," Dulcie gently corrected.

"And you do?" The tone was not bitter, merely defeated.

"Oh, yes." Dulcie said it as if it were indeed an old, old story to her.

"Well?"

"When Norry came here I saw he was sore about something, and I guessed a girl. I tapped him gently, and he let out the whole barrel. Well, I thought to myself, maybe the old folks are right. He's a nice kid; I'll divert his mind a bit. So I did. It was easy all right because he was just at the place where he had to have someone. Get me? He's a clean, decent chap, and that was the only outlet for what Professor Cole would call his great big ego. I just happened to be on hand at the critical moment."

"Then you think he doesn't really care?"

"It's real enough, only it doesn't matter so much who it is. Did he tell you he threatened to drown me if I didn't say yes? We were out in a boat, and I was buffaloed, if you ask me."

"He didn't!" Mrs. Whitlaw looked at the girl with horror-stricken countenance.

"Fact. But I managed to stall him off with a half-promise. I said I'd marry him sometime if he insisted. That depends on you."

"How?" Mrs. Whitlaw's mouth was dry and the syllable came out hollowly.

"It's me or her, or worse. The boy's been humiliated and badgered till he's desperate—desperate, I tell you. If I don't make you get that—hard—you'll hate yourself all your days. I know men, I tell you, and I know the signs. It's up to you. I'm better than some, but the Dora child beats me."

"I'm not so sure," came the unexpected reply.

Dulcie misunderstood.

"You'll take a chance?" she asked accusingly, her eyes hard with disgust. "You'll turn your son, your only son, loose in the world with that hunger in his heart?"

"I didn't mean that." The words were mild, humble.

"What did you mean then?"

"I'm not so sure the Dora child would be better for him than you."

Dulcie stared as if unable to grasp the import of the other's words, then a slow dark flush mounted her cheeks. Her eyes softened beautifully, and she gave a little protesting cry, impulsively throwing out both hands. The older woman took them and patted them gently. The eyes of both grew misty.

"I'm glad you said that," said Dulcie soberly. "It means a good deal to a—a woman like me. But you don't understand."

"There seems to be a good deal I don't understand, but I do know a real woman when I see her revealed."

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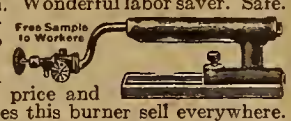

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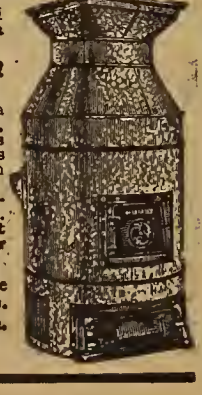

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Dulcie shook her head.

"I won't do," she insisted. "There's a rotten spot.?"

"What do you mean ?" The elder woman stiffened unconsciously.

Dulcie smiled faintly, a smile sadder than tears.

"I suppose I'll have to tell you. When I was sixteen my dad married me to a man as worthless as himself—only worse, because he was crooked, and poppa's straight, if he is lazy. He made me help him on a couple of jobs, and I was sent up for a while. After a couple of years he left me, and a month later was jailed for robbing a bank out West. My mother is taking care of my little girl. She's eight years old now. I don't keep her with me because it would make things hard for her. She's going to have a chance if mine *is* gone."

There was a long silence. Each seemed to be waiting for the other to break it. At last Mrs. Whitlaw said: "Poor girl!"

But Dulcie could feel the difference in her tone. It spurred her on to finish her task. Sitting up stiffly, she went straight to the point.

"That cuts me out—if you and your husband will fix it with Dora's folks. If you won't, if you don't care enough for him to do that much, I don't know."

"But if he thinks he cares for you now, will he want to go back?"

"I've been mulching the ground for several days, and the little seeds I let fall are beginning to sprout. I can do it any old time if you don't turn the water off. You might help too, if you felt like your train was due."

"You're sure," asked Mrs. Whitlaw, "that he would still be satisfied with Dora? I don't see how he could, after—you."

Dulcie gave a wan smile as she replied, a trifle wearily:

"It's all fixed, I tell you. I can turn him to her or bring him back on his knees to me. You've got to trust me, that's all."

"I do! I do!" cried the boy's mother, some inkling of the tragedy in this girl's generous offer touching her. "I'll do anything you say."

THE gray waves came cringing and curling up to the little cove, spewed their spume and retreated in surly order. Dulcie and Norval sat digging senselessly in the sand. The girl looked tired and older than her years. She pulled herself together with a visible effort and turned to the discontented youth at her side.

"What do you think your mother told me this morning?"

"What?" he asked listlessly. He was greatly disappointed because his engagement to the hotel girl had created so little excitement.

"She says that little simp with the vacuum bean is pining away for her Norry. Isn't that a scream?"

"Nonsense. And, anyhow, I fail to see the joke," he returned with dignity.

Dulcie eyed him maliciously.

"You should," she jeered.

"It seems to me," he said with some asperity, "your tone isn't very respectful to the man you've promised to marry."

Dulcie rounded her eyes at him in exaggerated wonder.

"Man! Promised to marry! Ain't you having a pipe dream?"

"More like delirium tremens," he was goaded to answer.

She tilted her head on one side and drawled aggravatingly:

"And ain't that a little bit unflattering to the lady you expect to *honor* with your worldly goods and name?"

Norval jabbed his stick upright in the sand and turned to her in uncontrollable exasperation. His lip trembled, and his voice shook as he tumbled forth the question:

"Are we engaged, or aren't we? I'm darned if I know!"

Dulcie eyed him with open contempt.

"When you threatened to end my young life in a filthy slough I told you I'd marry you some time if you insisted. I didn't suppose any gentlemen would hold a lady to that, but if you do insist, call round when my teeth are gone and I can't afford another false front, and I'll oblige. The dough would come in handy, and I would not have to see very much of my meal ticket—but, ye gods, what a bore!"

The boy stared at her unbelievingly, his indignant eyes mirroring ludicrously his struggle between chagrin and relief.

"It 'ud be almost worth while to see the baby-doll cry her china-blue eyes out for her tin god—a man who hadn't the gumption to marry her without Mama's consent! The poor, spineless little mouse—"

"Stop!" he cried furiously. "Leave her out of this!"

Dulcie laughed mockingly. He sprang to his feet, faced her as if trying to say something, thought better of it, and plunged off down the sands, his hat at a reckless angle over his eyes, his hands thrust deep into his pockets.

Without moving, Dulcie knew that around the next bend he would come upon the faithful little girl with the trusting blue eyes, and all would be well with them. But somehow the mental picture didn't cheer her drooping spirits. Suddenly she turned fiercely to the gray waves on which a tiny ray of sunlight had penetrated through the thinning mist.

"Crawl, you slimy, measly, cowardly snakes! Crawl and sneak and pretend you're too weak to come farther, when you know you're just crouching and waiting and waiting! Why don't you rise up and smash and boom and break, break, break? That's what I would do if I had your strength. Ugh! You make me sick!"

An hour later a fat, disagreeable-looking man entered the lobby of the Breaker. He registered at the desk without a glance at the dun-colored girl behind the counter, but just as he turned she raised her heavy lids and their eyes met. He followed the bellboy across the lobby to the foot of the stairs, paused, patted his pockets experimentally, and with a low word to the boy wheeled and walked back to the desk.

In the corner behind a dusty potted palm, Mr. Strauss rubbed his fat hands together and spat complacently at the green tub.

When Our Quarters Fight

[CONTINUED FROM PAGE 6]

Two thrift stamps will purchase a complete first-aid packet.

Ten thrift stamps will buy bacon for one soldier for a month.

One war savings stamp will buy 100 rifle bullets.

Five war savings stamps will pay the monthly allowance for a soldier's wife and dependent mother.

Fifty war savings certificates will pay for a fully equipped ambulance.

These are just a few of the necessary things which savings will accomplish. And when our boys come sailing home, those of us who have bought bonds and stamps will be able to face them with the realization that we have done our part as loyally as they have done theirs. Thrift, made necessary by the war, will be one of the blessings of the war. The sale of thrift stamps in our public schools virtually adds a course in thrift to the regular courses of study.

The effect of an era of thrift on the agriculture of the United States is interesting to contemplate. War is a great leveler of false aristocracy. Idleness is no longer respectable. By the measure of true manhood and womanhood an idler is a slacker. As an era of thrift approaches and everyone becomes a worker, the public will become more and more skilled in judging values in terms of actual worth. Under such conditions I look for a higher regard for agriculture as a profession. The values of farm products will be judged, as in the case of commercial products, by the cost of production plus a fair profit—not, as in the past, by what the farmer can be induced or compelled to take. Brains applied to farming will yield as profitable returns as brains applied to any profession or branch of manufacturing. I have no fear for the most thorough comparison by an intelligent public of agriculture with other industries. Farming has never suffered at the hands of essential industries. It has been taken advantage of chiefly by speculators, unnecessary middlemen, and sharpers of all kinds—men who live by their wits on the fruits of others' toil.

Such classes, so far as the food industry is concerned, have already been largely eliminated by the Food Control Act.

As I see the future of agriculture under an era of thrift the business side of farming will be better understood and the public, trained by war-time conservation, will be willing to pay a price for food commensurate with its food value, palatability, and quality. In the meantime let us remember that we are at war and the Government needs our energy, the full utilization of our land, and our dollars. War savings stamps are government promissory notes for our dollars while Uncle Sam is using them in this war against war. And when we see the initials W. S. S. on posters and in places where the stamps are for sale, let us think of them not only as war savings stamps, but also as meaning "We Shall Save," "We Shall Sacrifice," "We Shall Suffer," and finally "We Shall Succeed."

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The Lucky Makeshift Compass

By F. E. Brimmer

IN LESS than an hour the night would settle. Max Winton fought back this fact, but it still persisted. He rose and scrambled down the bank to the lake. A frightened beaver clapped his broad tail upon the surface with an explosive bang that caused Max to drop his fishing rod. When he stooped to pick it up, there was another fact that stuck like a burr, he was losing his nerve.

Instantly the lad pulled himself together and carefully surveyed the distant shoreline, seeking eagerly to locate some rock or point that was familiar. Then he shook his head hopelessly. Three times during the afternoon he had blundered upon this body of water, each time recognizing it as an unfamiliar place, and each time striking out through the dense forest in what he supposed was the direction of camp. For the third time he had walked in a circle and arrived at this same unknown lake.

He turned again with wrinkled forehead to find one clue, just one blue peak in the background, that would give him his bearings. The beauty of the crystal water, reflecting from its lily padded surface the glistening shafts of Adirondack white birch, only mocked him.

Lost—several miles from camp—three times stumbled upon the same strange lake! The full realization of his peril staggered him and he weakly sat upon a fallen tree trunk. There was no use in shouting, for he had wandered far from any camp or habitation to explore a new fishing ground. In dismay the lad remembered that he had not even told them which direction he was going when he left Camp Seldom Inn early in the morning.

Mechanically the fishing-tackle box was opened. Suddenly Max dumped its contents upon the ground and slid to his knees over it the better to find what he needed. Several new trout flies were tossed aside out of the way. He must quickly find a piece of hard, straight steel to carry out the plan—his only chance of escape from a night in the woods. It was not a pleasant thing to think about, for the sun had played a losing game with the clouds and a storm threatened. He must hastily construct a makeshift compass to get directions that would lead him to safety.

TAKING a No. 10 fishhook from its case, he held it upon a stone and began striking it light blows with a piece of rock for a hammer. If he could only straighten out the curve in the hook he felt certain that he could make its barbed point point toward the north magnetic pole.

Snap! The stiff steel hook broke under the blows. "Might have known it would not bend without being heated!" commented the lad. Quickly he ran to a white birch and tore off a double handful of the dry, paper-like bark. This was soon aflame, and by means of a split green stick he held another hook over the blaze until it was a bright red.

"Strike while the iron is hot," quoted Max cheerfully as he pounded the red-hot hook. Soon it was straightened into a slim arrow. The lad knew better than to cool the steel suddenly and so spoil its temper, which would have been the result of thrusting it into water.

While the straightened hook cooled, Max took out his pocket knife and opened one blade at each end. Then he found a shelf of rock and carefully stroked the blades against it. Almost every steel tool used by a workman becomes magnetized from the inductive magnetic forces of the earth. Shears, bars, chisels, knives—in fact, all long tools—receive magnetic currents from the well-hidden, natural magnets in the ground. This may be so slight that it is never noticed, or may be so strong that it causes improper working of the mechanism. A watch or sewing machine is often rendered useless until it is demagnetized.

The lad was careful to hold his knife in a nearly vertical position, since it is only in this position that the unseen lines of magnetism have the power of inducing currents into a permeable substance. After five minutes of what an onlooker would have said was simply sharpening a dull knife, the lad returned to the hook and found it entirely cooled. This was stroked with the magnetized knife.

Max was very deliberate about this and made sure that the barbed end was rubbed by the knife blade which he had held downward, while the other end of the straightened hook was stroked by the blade that he pressed against the rock in an upward position. By this means he transmitted a plus magnetism to the point of the hook and a minus to the eye end.

Already the night birds sent out their piercing, mournful calls. Quickly Max ran to the lake and scooped a drinking cup full of water. This was set upon a flat rock, and a cork, which he found in his tackle box, placed on its surface. Upon the cork Max deftly placed the magnetized arrow. Would his makeshift compass work? He would soon know.

The cork and its light burden bobbed here and there upon the water, for a full minute they dipped and ducked about, and then came slowly to equilibrium. The hook's barbed point promptly swung about on its cork and water pivot and came to rest—pointing straight north! Time for celebration was limited, but Max simply had to release a spontaneous yell of exultation at his success.

Sighting from tree to tree, the sturdy lad held to a southerly course until he reached the main trail half an hour later.

The School of Life

By G. W. Tuttle

WE DID not ask to be born and have our names entered in the school of life; but here we are—willing or unwilling pupils, which is it? Are we learning life's lessons cheerfully, gladly, optimistically; or do we chafe and fume, and fret and worry? There are so many lessons and life is so short.

Every day our wonder increases at our Father's never-failing goodness; at the discovery of new virtues and powers in some life where they have long been dormant, or in some new beauty of this wonderful world that we had long viewed with unseeing eyes. We need hearing ears and seeing eyes if we would acquire knowledge in the school of life. We need to open our hearts Godward every morning and say, "Lord, make me teachable to-day."

My aged grandfather often said to me, "George, I learn something new every day." Ah! is not every day a fresh page of life? Is it not half the charm of life to know that each dewy morning is a door opening into a wonderful field where we have not yet walked; where the flowers of knowledge bloom, and there are new tasks awaiting us and new lessons to be learned?

New Puzzle

Eight American Bills

The following description deals with the names and fame of eight Americans, all of whom bore the Christian name of William. No. 8 is a clew to those preceding.

1. William ———, a statesman, who concluded the negotiations with Russia for the cession of Alaska, in 1867.
2. William ———, a lawyer, who in 1843 entered into law partnership with Abraham Lincoln.
3. William ———, a lawyer, who was counsel for President Johnson in the latter's impeachment trial before the United States Senate in 1868.
4. William ———, a general, who gained the battle of Murfreesboro, but who lost the battle of Chickamauga.
5. William ———, a religious enthusiast, and founder of the Adventists in 1831.
6. William ———, a teacher, who founded and edited "Oliver Optic's Magazine."
7. William ———, a general of the Union Army, who was shot and killed in an altercation with General Jefferson C. Davis in the year of 1862.
8. William ———, a celebrated American general, whose name is formed by the first letters of the surnames of the preceding seven Williams of this list.

Answer to Puzzle

Printed Last Issue

Terminal Deletion

Creeds, reed.

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It's Always Fair Weather When Farmers Get Together

[CONTINUED FROM PAGE 8]

of all farmers' organizations to send delegates to its annual meeting the program of which deals with the larger questions of organized life among farmers.

The Federated Meat Producers' Association, with the object to "co-ordinate the efforts of meat producers," was launched at Lafayette, Indiana, April 12, with representative live-stock men from eight corn-belt States at the meeting. A national wheat growers' association to secure greater recognition for the wheat grower is being planned by some of the leaders in recent wheat growers' meetings in the Middle West.

While these attempts at co-ordination from the top down are helpful to the general movement, it is probable that full co-ordination will be accomplished from the bottom up rather than from the top down.

Farmers who give careful study to the situation recognize that already there is a very active movement on foot throughout the country to bring about the co-ordination of the work of farmers' associations through organized county and community clubs, central councils or bureaus, which is a long step in the right direction. In fact, this movement is country-wide, and is exemplified in the so-called farm bureaus, agricultural improvement associations, and farm improvement associations. These organizations, even if not at first recognized as the co-ordinating agency of organized groups, actually serve in that capacity. The membership is composed of farmers, farmers' wives, and such townspeople as wish to join. Usually there are representatives of every organization in the county. They have an executive committee and an advisory council or board made up of representative farmers from each township or community. The committee serves as a clearing house for the work of the different organized groups, endeavors to emphasize one specialty for each group, and keeps each informed as to what the others are doing. The result is efficiency and a sense of unity among all groups.

As an example of work of this kind may be cited the activities of a farm bureau in Kansas in a county where the Grange is strong. This bureau, through its executive committee and county agent, sees to it that the educatiomal work is done through the Grange in active grange communities and through a special educational committee or farmers' institute where no grange is organized. The co-operative purchasing of supplies is done through special committees. In another farm-bureau county, where the Grange is not found but the Farmers' Union is strong, the co-operative buying and marketing activities are handled by the Farmers' Union, and the educational work by the Farmers' Institute. The various phases of agricultural production are emphasized through breeders' associations, dairy associations, crop-improvement associations, or committees related to the parent or farm-bureau organization—at least to the extent that its officers are farm-bureau members. In other counties farm-bureau activities are similar. In fact, one of the greatest services that the farm-bureau can render is to co-ordinate the work of farmers' organizations already in existence so that their programs do not seriously overlap or compete, and to bring into existence such committees or organizations as are necessary in those communities where organized life has been wanting.

Through the services of such a central bureau the work of the other associations becomes more clearly defined and receives greater emphasis. It also becomes more specialized, and therefore more effective. Their meetings have a definite purpose, and those interested in the subjects emphasized in the special group will maintain membership in that group.

Questions of whatever nature that come to the central bureau will be referred by it to the group which can give them specific attention. For instance, problems with regard to breeding will be referred to the chairman of the breeders' association, who ex-officio is chairman of the live-stock committee of the bureau. Questions with reference to co-operative buying will be referred to the head of the Farmers' Union, if that organization is a member of this federation, the head of the Union ex-officio being chairman of the committee on co-operative buying and marketing. Matters pertaining to education will be referred to the Institute or the Grange, whichever is dominant, or to a special committee if neither is represented. In this way every organization in the county that will affiliate with this federation or bureau acts as a committee of the bureau, maintains its specific field, does a specific piece of work, and the other organizations learn to depend upon it for that work.

The mail from France

The value of this work of co-ordination is recognized by many of the progressive farmers' organizations of to-day. The Kansas State Grange, for instance, at its last annual meeting endorsed the farm bureau movement as an aid to agriculture in wartime. The Grange in many of the other States has been active in promoting farm-bureau organization, and has been its earnest champion.

National and state governments also have recognized the great value of the co-ordination of effort which well organized county bureaus produce, and largely for this reason have actively promoted their formation.

There is every promise, therefore, that the co-ordination of effort of farmers' organizations here suggested will be realized in the local community and the country at large, even though methods may vary to meet local needs and changing conditions. When it is attained, farmers' organizations, by reason of their strength, will command unqualified respect and full recognition, and will render the greatest service to State and Nation.

Troubles of a Tractor Inventor

[CONTINUED FROM PAGE 7]

"Well," said Mr. Calderhead, "there are a great many things that will have to be changed before you will have a practical tractor. I think you have done remarkably well for a start, but you will have to rebuild your tractor, and change all the things that are wrong—new steering gear, wider wheels, new exhaust arrangement, and there are many others. Take your starting crank: this is so low in front that if your tractor mires and the engine stops you will have to dig away the dirt in front before you can crank it again.

"Your cooling system is not large enough, because now you have to add a bucket of water three or four times a day. While near home this may not cause you much trouble, you will find it a whole lot of trouble when you are plowing a mile or so from a water supply. If you don't want to add more radiator, then add to your tank capacity, so the tractor will plow steady for at least five hours without the water getting dangerously low. Your patent arrangement 'to easily take out the front and rear axles for cleaning' is very neat, but who is going to take out an axle and clean it? How often have you taken off the front wheels of your automobile, cleaned the hubs, and packed them with fresh grease? They are easier to do than your new tractor axles. Better devise something that will positively prevent grit from getting in at all.

"With your present machine you have to dismount the engine in order to take up the connecting rod bearings," he continued; "you have no emergency brake, nor have you any means of locking the wheels when using the engine pulley for power. The driver has no protection from the sun and rain. To put a new lining on your clutch you will have to take the engine and radiator out. To put in a new rear pinion the whole transmission has to come out. If a nut or washer falls into the transmission box it will work to the lowest place, and when it gets there it will jam into the big gear because you have only allowed about three eighths of an inch clearance, when you should have made it nearer one and three-eighths inches.

"There are many other similar details that would have to be worked out before your tractor would be satisfactory, and after that there is the complete redesign for quantity manufacturing. My advice to you is to fix this tractor up for this year's work, and during the year write down every improvement you believe would make it better. Then in the winter months carefully redesign a new tractor and get it built for next year's work. Do this every year until you cannot think of anything that could improve the tractor or would make it handier or more 'fool-proof.'

"Then get some expert on quantity production to go over the whole design with you," concluded Mr. Calderhead, "to make all the necessary changes for quantity manufacturing. When you have built the tractor once more, with all these changes and still find it O. K., then you will be in a position to start manufacturing and selling. Even then it would be necessary to be careful at first, because you must remember that a tractor, to be successful, must not only work well under the conditions on your farm, but must also work equally well on other farms and under very different local conditions. Until all these have been tried out you will be in no position to know that every point has been covered."

This was discouraging news to me, for had never realized until then the real problem involved in designing and building a tractor. Heretofore I had an idea that as soon as I had built a tractor that would plow a good furrow, that was all that was necessary.

We have not given up the idea of building tractors some day, but at present we have temporarily fixed up our tractor and are busy plowing. Next winter I am going to make a brand-new design. Already I have thought of many improvements tha are not only possible but desirable.

A patchy pattern often means a miss, many times a cripple, and sometimes a badly mutilated bird

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Is your game getting away because of faulty pattern?

IF there's one thing that spoils a day's hunting, it is a gun that shoots a patchy pattern. Patchy patterns lead to the mutilating of one bird, and the missing or crippling of the next, at a like distance. Many a hunter "cusses his luck," when he ought to be getting better acquainted with his fowling piece and ammunition.

Why uniform pattern is essential

Hunters concede that at least *three shots* are necessary to a *kill*. When three pellets land in the body of a bird, the chances are that one of them will reach a vital spot. Less than this number may mean a *cripple*, no matter what the size of the shot or its velocity.

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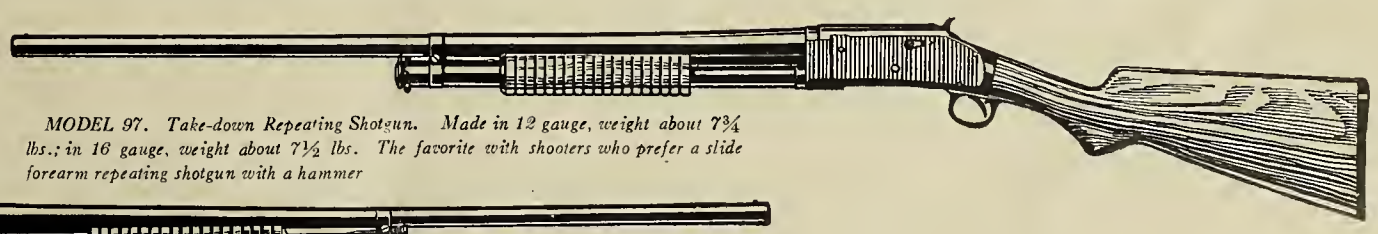

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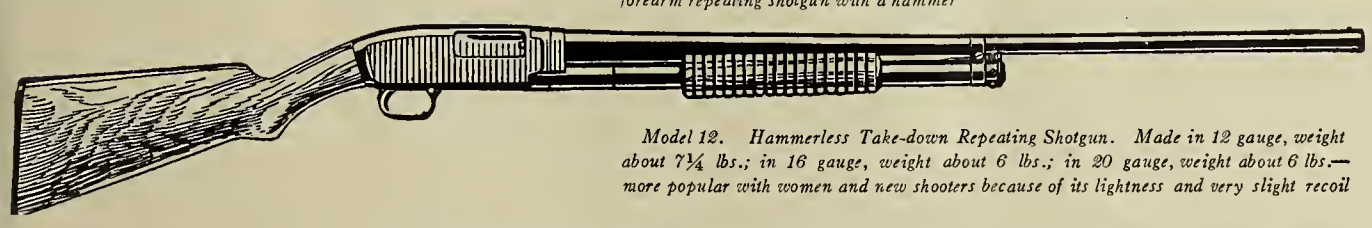

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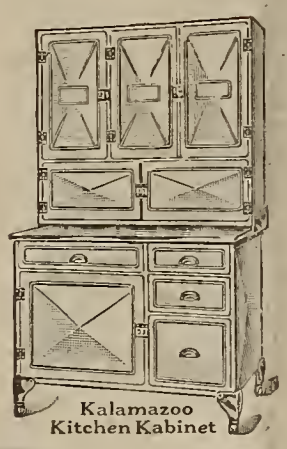
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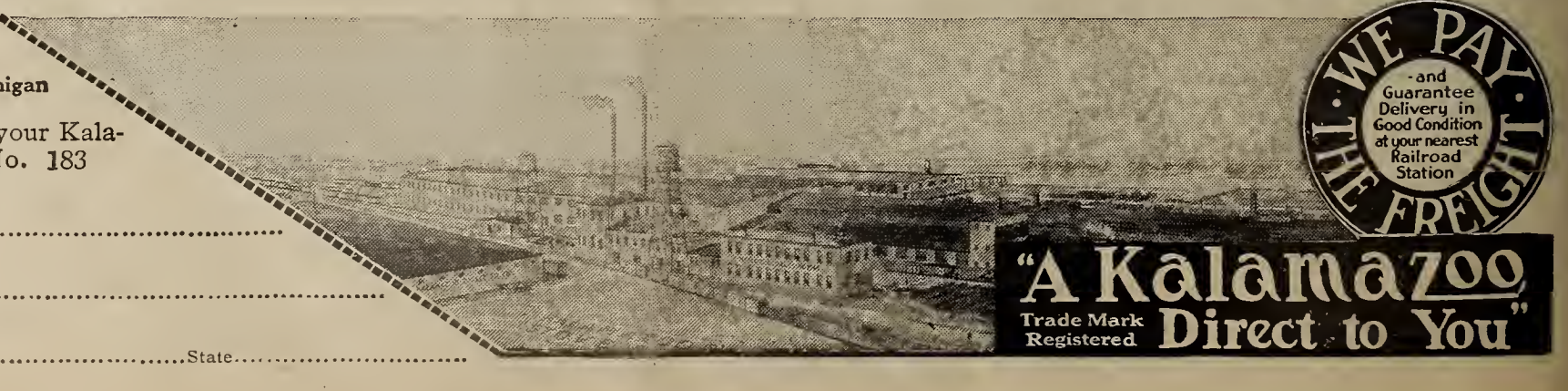

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Published Monthly by
The Crowell Publishing Company
George D. Buckley, *President*
Lee W. Maxwell, *First Vice President*
Thomas H. Beck, *Second Vice President*
Albert E. Winger, *Treasurer*
L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Harry M. Ziegler, *Managing Editor*
B. F. W. Thorpe, H. H. Haynes, Helen L. Crawford, *Associate Editors*
Alden Peirson, *Art Editor*

Editorial and Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at Post Office at Springfield, Ohio, as second-class matter, under Act of March 3, 1879.

By subscription, 25 cents a year; three years, 60 cents, or five years, $1.00. Single copies, 5 cents.

Volume 42 — OCTOBER, 1918 — Number 10

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The Mystery at Glen Cove

By Howard Vincent O'Brien

It was merely one of the usual Debrett dinners. Marie Brandt, a charming young widow, was there, dressed in black, with a diamond lavalliere at her throat. On her left was Leslie Steele, the most attractive man on the island

THE home of Rear Admiral Henry Debrett, U. S. N., retired, had nothing in common with the flower which wastes its sweetness on the desert air. The old gentleman and his wife found their greatest pleasure in a renewal of youth among the young people of the neighborhood. The comfortable old house, built in the generous tradition of an earlier generation, was the nucleus of all the gay life of Glen Cove.

The colored cook was of the old school, and the more there were to appreciate her fried chicken, beaten biscuits, and candied yams the better she was pleased. She served an elastic board: if a guest arrived with an uninvited friend or two, no one was surprised or disturbed. Another leaf was added to the table, and new names to the Debrett roster of admirers.

It had been a very important household to Leslie Steele and me this summer. To me because, as a bachelor, I love the incense of domesticity when it arises from so rich a life as that in the Debrett household; to Leslie because of Marie Brandt.

Marie Brandt—but I must not begin with her. If I am to preserve any sort of sequence in the relation of events as they happened to me I must begin with Diana, the cook, and Toguchi, the butler. The admiral would rather have lost a leg than have lost Diana. Diana objected to the coming of Toguchi. She thought it disreputable to be yellow, and she made no distinctions. The Japs were Chinese to her, and no self-respecting colored woman cooked for a household which admitted a Chinaman.

Admiral Debrett was a naval inventor, a famous one, and it was gossip that he was working at something extraordinary. The thought ocurred to me that if the Japs were engaged in espionage, the Debrett household would be a good one, from a Jap consideration, into which to introduce a naval officer in the rôle of butler.

Toguchi's immediate importance in our scheme of life, however, was that, until Mrs. Debrett could reconcile Diana to his presence in the house, a party which the Debretts wanted to give could not be given. There were several days of doubtful conflict, but Diana capitulated and the Debrett hospitality resumed its normal course.

I said a party. It was merely one of the usual Debrett dinners. It was on an August evening, and all the guests were regulars with the exception of a slim dark-eyed young fellow who, I soon gathered, had come at the invitation of Agatha Burchard. His name, I was told, was Carter. The others I knew very well. There was "Dolly" Quan, an impossible youth whom none but the large-hearted Debretts could tolerate; fat Quigley, reveling silently in Diana's rice; the Willy Merediths; Leslie Steele, with whom I had come; and of course, Marie Brandt.

I say "of course," because it had become a well-established fact that Leslie Steele would be the most dismal guest one could invite unless the inscrutable Mrs. Brandt was there also.

Personally, I found it impossible to sympathize with his obvious infatuation, although she was as charming a young widow as one might hope to encounter, and, despite certain gaps in her antecedents, a woman of unusual taste and refinement.

She was a sculptress of not a little distinction, thoroughly and admittedly foreign, who had taken a cottage at the Cove for the summer. It was the fact of being "interesting" and "different," no doubt, which had offset her lack of credentials, and admitted her into the innermost circles of an ordinarily very exclusive community.

Perhaps I resented her success a little, being myself an ancient and honorable member of the first settlers; but chiefly I was annoyed by the coolness with which she received the advances of Steele, by all odds the most attractive man on the island, and my most intimate friend.

It was a gay assemblage which sat over the dessert at the Debrett's that evening. There was much speculation over the results of the boat regatta on Saturday, and weighty disputation concerning the relative merits of a new type of putter lately offered to the golfing fraternity.

Agatha Burchard was, as usual, as full of sparkling nonsense as the champagne was of bubbles. She chattered merrily with everyone, not even refusing a little sharp badinage with myself, whom, I knew, she considered hopelessly dull.

BUT despite her care-free cheer, I fancied several times that a faint shadow flitted across her smooth forehead, and that the laughter in her eyes was momentarily quenched. I concluded, however, that it was only my imagination, which is, to be frank, forever leading me into the most absurd speculation. I even chuckled aloud. One could not well imagine a more completely unmysterious person than Agatha Burchard. If one must fasten mystery somewhere, I reflected, he might much better consider Mrs. Brandt: strange, unfathomable things lurked in the depths behind those long black lashes of hers.

I turned to look at her. She was a picture of languid, almost feline, repose. As always, she was very simply gowned in black, with a single-diamond lavalliere at her throat. She was ever a woman of long silences and grave, measured speech, but to-night her words seemed few indeed. Now and again, as she raised her eyelids slowly to smile in wan apathy upon the earnest efforts of Leslie Steele beside her, I fancied that they seemed heavy with sleep. Occasionally she spoke, but only, it seemed to me, to give plainer evidence, in the curve of her lips, of her utter indifference.

I next turned my speculative thoughts upon Agatha's unknown friend, Mr. Carter. I had kept him under observation at intervals through the evening, and I had remarked upon his taciturnity. At first I had attributed it to a quite natural shyness in the presence of our intimate group, but gradually I had come to the conclusion that it was something more.

THE absurd thought kept recurring to me that he was playing some sort of a rôle, a thought oddly strengthened by his occasional flashes of animation. In these brief moments his lips parted in an easy smile, and his eyes sparkled humorously; but almost immediately his features would harden, and a kind of curtain would drop over his entire personality. He gave me an impression of great alertness, mental and physical, deliberately concealed.

His eyes had a trick of playing rapidly about him, in a fashion not so much furtive as cautious, and once, when a servant paused behind his chair, the whole expression of his face changed. The youthful jaw suddenly hardened, and into the mild gray eyes flashed a momentary gleam, quickly extinguished.

That instant look—was it fear? Whatever subterranean part the young stranger was playing in life, it was a part, I decided, to which peril was not foreign.

I fell to wondering about him—what his place in life really was; if Agatha—then I laughed outright. Fancy the youngest of the Burchards being concerned even remotely with anything not perfectly proper and conventional. Her mother, my own cousin, would have me clapped into a madhouse for such a thought. Little Agatha, pink-cheeked child—and yet, I—I—why, confound it, was I going out of my head? I could have taken an oath that faint shadows of trouble had again crossed her brow. As if in confirmation, her eyes caught mine, only to drop immediately before my puzzled gaze, as a quick flush of color suffused her cheeks.

She raised her eyes at once, however.

"Cheer up, Jimmy," she called across to me. "The old wound troubling you again?"

The question was an unsympathetic pleasantry upon the fact that I suffer grievously [CONTINUED ON PAGE 18]

The Wheat Wouldn't Wait

How a county agent, backed by farmers and business men, secured the labor to save 110,000 acres of grain

By George E. Piper

FROM Cheyenne County, in extreme northwestern Kansas, comes a plain, unadorned tale of the saving of wheat, of hundreds of headers that were waiting for their crews as the wheat lay ripening in the blazing sun, and of a typical, everyday wheat-belt county agent.

Cheyenne County is a typical wheat county, except that it has very limited railroad facilities. The county lies between the main lines of the Burlington Railroad in Nebraska on the north and the Rock Island on the south. Both of these roads run far outside the county. The county is served only by a branch line of the Burlington, which creeps in from Orleans, Nebraska, on the east, and stops at St. Francis, in the center of the county.

The more than 800 farmers in the county always have experienced great difficulty in securing sufficient help to handle the harvest. And now, with the young men of the county and much of the normal available labor supply over draft age gone into some form of the nation's service, the farmers could see no way of getting sufficient help at a fair wage to harvest their 110,000 acres of wheat.

Cheyenne County, at the time, was served by a district emergency demonstration agent, E. I. Maris, a young man who was looking after the agricultural interest of Cheyenne and Rawlins counties. Maris served Cheyenne County well during the late winter and early spring, distributing and testing its seeds, controlling its outbreaks of blackleg by vaccination, exchanging pure-bred sires, etc. And so, when he outlined the possibilities and value of a permanent Farm Bureau with its county agent as a means of solving the county harvest problem, along with the other problems brought about by the war, they became interested.

More than 200 farmers organized the Farm Bureau, and early in June they hired A. C. Hancock, twenty-eight years old, well trained for county-agent work and a graduate of the Kansas State Agricultural College, as county agent. Hancock, on taking up work in the county, found a scared bunch of farmers who were seeing visions of a big wheat crop ripening and going to waste because of a lack of labor. It is a peculiar thing how a farmer can stand wind, hail, and drought and not say a word; but let the labor supply run short, and he is completely up in the air.

Kansas as a State had prospects of a bumper wheat crop, and was reported by the state farm-help specialist to be short 80,000 harvest hands. By meeting first in eight district meetings and later in a state-wide meeting, the wheat growers in Kansas had agreed upon 45 cents an hour as a fair and liberal wage for harvest hands. This was a mighty attractive wage, but one far in excess of what they would have to pay as a result of a little organized effort.

Cheyenne County believed that they would need 1,000 harvest hands, and her farmers, knowing that they were isolated by lack of railroad facilities, could see no way by which they could secure men in competition with the central wheat belt of the State, which would catch and hold the men on coming in as they usually do with the harvest from the South.

Soon after Hancock took up work in the county, one hundred and fifty serious-faced farmers met in St. Francis, the county seat, to discuss the labor situation. They came from every corner of the county, and many of them who had left their yellowing fields of wheat seriously proposed that they boost the county wage scale to $7 a day and advertise this wage extensively so that they might be sure of attracting sufficient labor to the county.

The county delegate, who had attended the state harvest-labor meeting, and the county agent, who had the assurance of the Federal Department of Labor and the state farm-help specialist that sufficient labor could be secured, finally convinced the meeting that their alarm was unjustified, and that by the centralized efforts of the Farm Bureau directed through its county agent the situation could be handled.

With their assistance the county was divided into districts, and men were delegated to look after and report the labor needs to the county agent in St. Francis. Sane, workable plans were developed, and the delegates, being convinced, asked the county agent to hold meetings in the ten large townships, explaining the situation so that the sane co-operation of all the farmers could be secured. Skepticism, because of past experience, was met at these meetings.

A header scene in Cheyenne County, Kansas. Six men, ten horses, and two barges are required for a complete crew

Much had to be done. The bulk of the harvest hands could be expected to come from the south and east, and no railroad facilities existed to bring them into the county. In order to get them they would have to be transported in from Goodland, to the south, on the main line of the Rock Island, and some might be transported into the eastern part of the county from Colby, to the south and east, at the junction of the Union Pacific and Rock Island. Some might be secured from Benkelman and Haigler to the north on the main line of the Burlington, but not many could be expected to drift in on the little branch line from Orleans, with its one local train a day.

The Entire County Was Organized

SO A TRANSPORT system had to be organized, and funds raised to finance it at least in part. The county agent believed that volunteers with cars could be secured for this service from among the retired farmers and business men of the two small towns in the county, especially if oil and gasoline were provided free.

The president of the Citizens National Bank of St. Francis was convinced, and the bank pledged sufficient funds without interest to finance the entire labor operations of the bureau. Hancock took his problem to the farmers at the meetings, and more than 100 farmers pledged a sack of wheat apiece to be sold at auction to raise these funds.

Telephone service in the county was slow, and the county exchanges closed at ten o'clock. At the Farm Bureau's request extra operators were put on the exchanges, and all agreed to keep open until midnight during the harvest rush. A local man volunteered to act as district reporter at Bird City, the only other town in the county on the branch line railroad besides St. Francis. This man kept a careful record of all calls and requests for help, also just where the applicants could be found, so that no time was lost in the connection of the farmer and his prospects.

A certain group of cars was assigned to a specific territory. In this way no ground was covered twice, and all trips were made in a shorter time.

A force of volunteers with cars was recruited for the transport service, and arrangements were made at a filling station to supply them with free oil and gasoline. Such an offer several years ago was unheard of, but now there was no other way. The help was an absolute necessity if the crop was to be saved.

Meanwhile the harvest had finished in Oklahoma and had started well in southern Kansas. As the harvest closed in the South the forces of the county agents and the field forces of the U. S. Department of Labor were directing the harvest hands northward, where the sickle blades on the headers were beginning the sharp staccato song of the harvest.

A ten-day period of hot, dry winds swept over Kansas, advancing the harvest at least two weeks, and making the entire harvest period at least ten days shorter. Suddenly all of west central Kansas, the wheat belt of the State, was harvesting, instead of the harvest sweeping northward slowly in fairly even belts. A tremendous demand for men developed, and a small group of counties on the west edge of the central wheat belt became alarmed, and jumped the state harvest wage scale from 45 to 50 cents an hour.

The harvest began in Cheyenne County the last week in June. The county agent, by telegraph, telephone and postcards, canvassed the country for men. Posters were mailed out to be posted in railroad towns scores of miles in every direction. Two energetic traveling men were commandeered at the hotel at St. Francis and put in charge of the county agent's office and the organized transport service. Hancock took to the road, and for the next ten days averaged 200 miles a day supervising the organization and covering the railroad towns to the north and south. The small volunteer harvest force from the small towns in the county went out and eased the situation, and a small drift of men from the outside began to come in.

A few nervous farmers at times offered higher wages, but these were reported and taken care of by the County of Defense, which in most cases warned them by phone. One farmer offered as high as $8 a day.

The federal labor bureaus in Kansas City, Denver, and Omaha, on telegraphic demands, rounded up reserves of men and started them out for Cheyenne County. There were anxious moments, however, when severe shortages existed for a few hours. One group of harvest hands which had been brought in from Colby with the understanding that they were to receive 45 cents an hour, on arriving in St. Francis and learning the urgent need of men were organized by six agitators to stand out for 50 cents an hour. This would have disorganized county labor conditions badly and might have led to serious complications.

The sixty harvest hands grouped themselves about the leaders in the street of the little town, in front of the county agent's office. Inside the agent's office were gathered farmers who wanted help, members of the County Council of Defense, a few business men, and the county sheriff. Here was a problem and possible trouble that the little county-seat town had never experienced before.

Each man offered suggestions, waited on each other and finally turned to the county agent. But this was a stumper for the county agent, even though he knew that the majority of the people of his county expected him to be able to handle any kind of an agricultural problem. But solving this kind of a problem was not taught in the agricultural college, and neither had it been part of the experience of a farm-raised boy.

All he could think of suggesting was, as he looked over the group and caught the sheriff's eye, "It seems as though you ought to have a few more deputies, Sheriff." "All right," said the sheriff, "I'll just appoint you." So the newly appointed deputy sheriff, who was also such a new county agent that he sometimes felt embarrassed, led them out and faced the group of harvest hands. Persuasive talk convinced most of them, and all went out to the fields but two, who were promptly transported out of the county by the transport service.

As the harvest eased in the South, the Federal Labor Bureau and the county agents directed the harvest hands northward, and the local situation began to ease. More than 100 automobile loads of harvest hands were transported into the county from the railroad points; a few came in on the branch line railroad, farmers brought in a few, and the wheat was saved.

So not only were 110,000 acres of wheat saved, which will soon be on its way to our allies, but in addition Cheyenne County will plant a larger acreage of wheat this fall, because enough labor will remain in the county to seed it, and the farmers are convinced that they can rely on sufficient assistance through their organization to secure a sufficient supply of labor another year.

When Our Family Dolled Up

We had never thought that a little care of personal appearance could make a great difference in our good times and put pep into all our undertakings—until we tried it

By R. M. Boyle

"I WISH to heaven you'd *shave* once in a while, George Anderson!" That outburst of Em's was what started us. She had been going to high school in town for three years, and it was pretty clear each time she'd come back that she didn't like our company very much at first until she got used to us again. In fact, if she hadn't been loyal clear through I confess I would have had a sneaking fear that some time Em would grow ashamed of us out on the farm.

We were sitting at the supper table when she fired that out of a clear sky. George's face got a dull red, and he rubbed the back of his hand over his cheek. Then he said:

"What's the idea in dolling up to-night? Going to have company?"

It was Em's turn to flush up when her mother cut in with, "Oh, no. Just one of her high falutin' notions. I don't know what she wants to be wearing her good white dress around the house this way for. First thing we know she'll be wanting to spend everything she can get on her clothes and putting on style like the Burgesses."

"I'd like to put on more than the Burgesses," slammed back Em. "I'd like to have something new to put on every day. I'd like to see you all in something new every day. I'd like to see Mother with her hair curled and in a blue silk dress and silk stockings and pumps.

"The only reason the girls don't rave about Mother's hair the way they do about Mrs. Burgess's is that it isn't shampooed often enough to make it fluffy and silvery, and because she drags it back and lets the short hairs string. Just because Mother's got fat and goes around in a black suit four years old and a hat you'd laugh at if you saw it in a movie, you think she's lost her looks. She's got more looks now than she ever had in her life, and if you'd just let me doll her up once, you'd see.

"And I can't see why you and Dad can't fix up," turning to George. "You've got a lot more spare time, taking it the year round here on the farm, than a store clerk has, and yet you never take the trouble to be presentable unless you're going to church or to a show. There isn't any sense in this slouching around at home and dressing up just for other people to look at us. We have to look at each other, don't we?"

For a space the only sound that broke the silence was the chink of the dishes. Em sat there looking like lightning on the warpath and her mother was swallowing as if she was so mad she might begin to cry at any minute. I was trying to think of some appropriate remark to squelch the whole subject. Then George, who is a born pacifist, and who worships the ground Em walks on, spoke up:

"You're right, Em. We've got just as much to put in glad rags as the Burgesses any day. There isn't any sense in us going around all the time looking like the wrath of heaven. I think it time to make a change."

Em always subsides when her brother comes across like that. She looked somewhat ashamed of her little flare, and in a few minutes we were all talking as if nothing had happened. But after supper George went upstairs and shaved and changed his clothes. He probably felt rather sheepish about giving in to Em like that, because he suggested that they drive into town and see a movie, as if that was what he had dressed up for.

When the young folks were gone, I watched their mother pottering around doing one thing or another, and got to thinking of the time we were married twenty-eight years before and came to live on the farm. We were renters then, and it took years of scrimping and working and devising to put us on our feet.

We didn't go about much—we didn't have time, so we economized on clothes. We didn't care much about styles as long as a suit held together, and the wife never was one to dress up much anyway. Besides, with keeping up with new machinery and paying for the children's schooling, there wasn't much left for frivolity.

But, in a way, Em was right. The Burgesses hadn't a cent more than we had, but they did seem to have a sight more fun. Mrs. Burgess was president of the Clover Valley Woman's Club, and it seemed as if there were young folks over at their house every night. They had a tennis court on their place, and they had a porch, cozily furnished, where the family gathered in summer, while someone read aloud or played the phonograph. They had a fine home, and flowers and shrubbery which they seemed as proud of as their pure-bred live stock and big modern barns.

They had made very cordial advances toward us when they first came to live in our neighborhood, but we had not responded. We had decided that they thought themselves superior, and George and Em were stiff and shy with them. Personally I liked Burgess. He seemed to be a good, practical man and was making a success. But, as Em asserted, he wasn't making any more money than I was.

"Agnes," I said, "what's the matter with taking those kids at their word?"

She looked up with a queer expression, and I realized what made it. I guess I hadn't called her by her own name for years. Sometimes she got Aggie or Ag, but most of the time we had dropped into calling her "Ma"—except Em. She called her mother.

Right then we planned to surprise the children. Em was going to the city the next day to visit a school friend and would not return until the following evening. The wife and I decided that we would go with her, presumably on business with some of our city customers, but would spend the day shopping.

Bought Our Clothes in the City

WE REACHED the city a little before noon, had an early lunch, and then parted—each to do his or her own shopping. We planned to meet late in the afternoon and catch the evening train home.

When Mother met me she was quite flushed and excited, and looked younger than she had for a long time, even though she didn't have on any of her new clothes. We planned to dress up the next evening before Em got home. Mother seemed to have caught the spirit of the thing and could hardly wait.

The next afternoon, after the housework was done, I saw Agnes out at the back of the house drying her hair. I thought: "Mother is sure taking Em's hint to heart!" Turning the thought over in my mind I decided it was up to me to drive into town and get a haircut. I had intended doing it in the city the day before, but had not had time. I got a haircut and a shampoo.

Immediately after supper we went upstairs to put on our new clothes and take a start out of the children. And I must confess that Agnes took a start out of me. I didn't ever think she would have the nerve to do it, but there she was—blue silk dress, silk stockings, pumps and all, as tickled as a girl over her first party.

When we came down-stairs, Em, with a surprised "Oh, mother!" just ran up and flung her arms around her mother and hugged her. All of a sudden her eyes lighted on her mother's hair, shining like silver but done in the same way. That was the one thing Agnes just *couldn't* change.

"Oh. Mother, let me wave it!" begged Em. And waved it was.

Of course, after Mother, I wasn't much of a sensation. But George and I had a good talk. I told him I could see where we had been making a mistake. We had been spending many times as much on new machinery and on repairing the barns and sheds as we had on the house—in fact, we hadn't thought much about how the house looked on the outside.

Mother kept it clean on the inside, and that seemed to be about all that mattered, except Em had announced, a few months before, that it was a good thing there were no small children in the family or something would be broken every ten minutes, they couldn't help it—there was so much bric-a-brac about. To her notion the house was just as old-fashioned as we were, and she wasn't far from right.

When George and I went over the books we found that our income had been spent somewhat after this fashion: For running the house, $590; running the farm, $785; new machinery, $250; stock, $460; improvements in homestead, $25; amusements, $45; clothes, $160; miscellaneous, $50.

We worked it over and decided that this is more the way those figures ought to stand:

For running the house, $700; running the farm, $785; new machinery, $250; stock, $460; improvements in homestead, $150; amusements, $125; clothes, $400; miscellaneous, $100.

We've been trying to live up to that system, or something like it, for three years now. Don't get the notion that we are dressed up in our best all the time. Probably nine-tenths of the time we're in working clothes; but we're in presentable working clothes. When we worked it out the actual figures showed that a fifty- or even seventy-five-cent straw hat for working in the fields was more economical than a fifteen cent hat that the first wetting wilted down.

A three-dollar house dress cost a little more at first than a ninety-eight cent wrapper, but it wore a lot better and looked well. A khaki suit for work cost but little more and looked much better than overalls and blue denim.

Maybe it was luck, and maybe it was something else, but the deals we made with strangers who called at the farm were more advantageous than they were in the days when we didn't care how we looked. Possibly because we looked more prosperous they didn't have the nerve to try to beat us down on our price.

If the prosperity of the farm is any indication, we're better farmers than we ever were, and I can't see that the house is losing out any. Somehow or other, just dressing up has put punch into everything we have done lately, and we have had more fun doing it.

Agnes and I have dressed up our grammar, the whole family has dressed up its manners, the house has been dressed up inside and out. George has had a lot of good ideas about marketing that have worked out well. We've attended church oftener and gone to lectures and shows in town and visited more than we ever used to.

Best of all is the change that has come in our relations with our neighbors. We have more friends and are having more fun than we ever dreamed of having before.

We have discovered that our attitude toward the Burgesses was just common, everyday envy. They want all the joy out of life that they can get, and they know that you don't have to live beyond your income to get it.

The old adage says that fine feathers don't make fine birds, but they are certainly a big help to fine birds. If anyone finds things slipping down-hill steadily, or that he is getting old-fashioned and dull and slow, I say the best tonic is simply—dressing up.

All of a sudden Em's eyes lighted on her mother's hair, shining like silver but done in the same old way. "Oh, Mother, let me wave it!"

The First Year of a $5,000 Farming Venture—*By Henry Highfield*

AFTER balancing the books at the end of the first year's work at Cornucopia Farm we are unable to show a cash profit, due partly to the fact that the farm has rather a heavy load of overhead expenses to carry. At the same time we do not discover any deficit, and are starting our second year well satisfied with what we have already done, and fully convinced that the profits will increase steadily with each succeeding year.

In the hope that our mistakes may be a warning to others, and that our experiences and plans may contain some useful suggestions, we give below a brief outline of our first year's activities:

With a cash capital of $5,000 we purchased in January, 1917, one of the old Pennsylvania farms. The price paid for the farm, including the buildings, a few implements, and a small amount of hay, grain, and straw, was $2,500. There are a little over thirty-eight acres of land, twelve of which are in woodland, about two acres in orchard and buildings, and the balance cleared land in a fairly good state of cultivation. Part of the orchard contained old apple trees of good varieties, but in need of pruning and spraying, and the remanider of the orchard had been planted several years earlier in peaches.

The gross returns from the four cows during 1918 will be more than $1,000

The house and barn were large and well-built, and both in good repair. There was an excellent spring, flowing directly into a picturesque spring house shaded by a large pine tree. There was also a strawberry patch, with the vines terribly matted, and a few red raspberry canes. Alfalfa had been started in several places on the farm, and one field adjoining the barn contained a good stand of this crop.

As we owned and occupied a comfortable house in town, about three miles distant from the farm and in the same township, our plan contemplated employing a tenant farmer. We had previously arranged with a family to move on the farm, and as soon as we could get possession—February 15th—our farmer moved his belongings and we went to work.

There being no live stock on the place, our first thought was to purchase what we required for a start, and by the end of the first month we had invested about $700 in live stock, poultry, seeds, and plants. These purchases included a team of horses, 4 cows, 15 pigs, 30 hens, 200 baby chicks, 50 ducklings, a supply of vegetable seeds, and 2,000 asparagus roots. During this time we also purchased a small car and trailer at a cost of $500, making our total investment up to this time $3,700. The remaining $1,300 of our original capital was put in the bank for living and operating expenses during the first year.

It will be seen from the foregoing that we did not go into this venture with the idea that a farm of less than 40 acres would support two families and make a fortune for the owner the first year. The past year's experiences, however, strengthens our belief that our scheme of things is a good one, and one which will win out.

Our original plan was to concentrate our energies on three departments; viz., hogs, poultry, and asparagus. We have subsequently added dairy products as a fourth main line, as we have found that the milk business is a good thing to tie to in this line of work. For a few years our truck business will be also a department in itself, while the other lines are getting started, but we expect to make it only a means to an end.

Our arrangement with the tenant was that he was to have a stated salary of $35 a month, his house rent free, one hog in the fall, six quarts of milk a day, two dozen eggs a week when possible, all of the fruit and vegetables he needed for his own use, and 10 per cent in cash of all cash sales made. This arrangement has worked very well, and during the first year it has averaged about $45 a month in cash, and counting all of the perquisites amounts to about $1,000 a year to the tenant. The 10 per cent feature is an incentive to the tenant to produce cash crops, and the owner is only too happy to pay the percentage when his own returns are in proportion.

Felt His Way Along Carefully

SO MUCH for investment and plans; now to return to our experiences. During February we spent some time looking around for a suitable team and some good cows. We had plenty of opportunities to buy cows, but we were looking for good cows. With the price of bran and chop going up by leaps and bounds, we realized that it would take a full milk pail to offset the feed bill. But we found what we wanted before the first of March, and at once began selling milk and cream.

As we had in the meantime secured some of the pigs, we decided to separate most of our milk, selling the cream to an ice-cream factory and feeding the skim milk to the pigs. During the entire year there has not been a day that we have not taken in some cash from our dairy, and some days we have sold as much as four dollars' worth of milk. We estimate that our gross returns from our four cows during 1918 will be more than $1,000.

Our plan for getting started with hogs was to buy a trio of O. I. C. pigs, registered stock eight weeks old, for a foundation, and to raise these with care and keep them for breeding. This was done, and the O. I. C's. arrived the first week in May. They have developed splendidly, and last fall took two firsts and a second at our county fair.

The sows were bred during the winter so as to get a good start this year, our plan being to raise some of the pigs for butchering and sell some at good prices for breeders.

In addition to the O. I. C.'s, we bought from neighbors 12 pigs of various breeds for fattening. These pigs we started on shorts and milk, gave them a two-acre alfalfa field, after the first cutting, for their intermediate growth, and finished them off on corn. We butchered them ourselves during November and December, made a good part of the meat into sausage, which we retailed in town, getting good prices and incidentally establishing our reputation as sausage makers.

During February and March we spent some time tearing down a large poultry house which we owned in town, hauling the lumber to the farm. Then, whenever we had an hour or two between other jobs, we rebuilt the laying-house on the farm, or at least part of it, making a house 40x16 feet, with double floor and convenient arrangement of roosts, dropping boards, and so forth. This house was not ready for occupancy until about the first of September.

We are forced to admit that the poultry end of our business, to date, has not been a success, but we have learned some lessons, and believe another year will witness better results. The former owner of the place had about 30 hens of uncertain age and lineage, but as they were on the farm and the price was reasonable we bought them, and sold quite a few eggs from them last spring. To get started with the breed of chickens we had decided upon—the Buff Orpingtons—200 baby chicks were purchased from a hatchery. These chicks did not do well in the brooders. The weather was cold, and they got wet and chilled a couple of times, causing losses in the ranks, so that by the end of the summer we had only 75 pullets to go into winter quarters, together with the scrub hens already mentioned. During the summer we sold 24 young roosters at good prices, one of them bringing $1.25 for meat. The money received for these roosters is the only money our Orpingtons have made so far, as we have not had an egg from our pullets.

The pullets looked fine when we housed them for the winter, and we thought they were in good shape to lay, but we had figured without the ducks. As there had not been time the first summer to erect separate quarters for the ducks, we thought there would be no harm in their occupying the laying-house with the chickens. This was a disastrous move, for the ducks spent most of their time in the drinking fountains, and the pullets soon contracted a disease from which they suffered all winter. We lost about half of them before we discovered the trouble and corrected it.

We hope to be more successful with our poultry department this year, for we believe it can be made to show a nice profit, and also that it will work satisfactorily with the other lines we are following. We have some winter wheat planted, and expect to grow some kafir corn and sunflower seed to mix with our corn, oats, and buckwheat, and thus have a good mixed grain ration for the fowls next winter.

The asparagus department is, of course, still in its infancy, as no appreciable returns will come from it until the third year. However, our plants did well last summer, and we expect to cut it a little next spring, but not enough to interfere with its further development. We have selected asparagus as one of our leading money crops because in this locality we very often have late frosts and all fruit crops are liable to be a failure for this reason. With the asparagus, however, while a frost would damage the stalks above ground, the next day's crop would be unharmed. We have planted our roots deeply and intend to cut it below ground, thus securing tender, blanched stalks.

While the four departments outlined above are getting worked into shape, we find it necessary to take advantage of every opportunity to make a few dollars. During the winter, besides caring for our stock and delivering the milk, we find time to do some profitable work with our team, hauling coal and wood. Then in summer we make the truck patch give a good account of itself. Last summer we specialized in Gradus peas and Golden Bantam corn, both of which were satisfactory crops. Next year we want to repeat with the peas and corn, and are also planning to produce tomatoes and cauliflower.

We said at the outset that we had made no profits for our year's work. We will have to qualify that a little. There are five in our family and seven in our farmer's, and we have all been living well ever since we secured the farm; that is, we have had plenty of fresh vegetables of excellent quality, including our potatoes, also plenty of milk, cream, butter, lard, sausage, ham, buckwheat flour, fruit, and canned fruit and vegetables. These items have saved a good many dollars, and every dollar saved is a dollar earned. It has been our aim not to waste, and whatever we were unable to use ourselves we have placed on sale at market prices. This year we are producing all the food we possibly can on our 38 acres, and are at the same time laying the foundation for a business which we hope will be both profitable and permanent.

The house was large, well-built and in good repair

These pigs took several prizes at our county fair

Ledrans, a Farmer of France

To help solve the disabled soldier's problem of making a living, the French Government has established a number of schools to re-educate him

By C. W. Wagon

"AND I'll come back to you, *ma petite cherie*." It was a soldier in horizon-blue that spoke, and he stooped and kissed the small hands he held, the hands of a sunny-haired girl who stood there, smiling through her tears, or weeping while she smiled—as you will—for the great war had come and Ledrans, her happy, light-hearted, gay Ledrans, was leaving her alone, there in the little village of Champcervons, on a blue sweep of La Manche, while he answered the call to arms.

So Ledrans fell into the long blue ranks that threw themselves between Paris and the invader, and Fate was kind to Ledrans, for he prospered in the trenches, receiving no hurt and learning much that he did not know when he lived by the sea in Champcervons. And he thought often of his sunny-haired sweetheart, and of how much he would have to tell her when he went home.

More and more skilled grew his good right arm whose muscles swelled with pride in his bright blue sleeve; truer and truer grew his aim, in the fine though hazardous art of grenade-throwing. The deadly little instruments sprang from his hand well timed, absorbing the will and energy of his fine young muscles, leaping "No Man's Land" like sun-bent comets and striking death in the foeman's trenches.

After Ledrans had been in the front line for a long, long time—at least, it seemed a long time to him—he was relieved and placed in a school for grenadiers as an instructor. Fate plays strange tricks: Ledrans had spent six months in the trenches flinging little iron nosegays at the boches; one day the instructor stood before his class in the open—there was a premature explosion, due to a faulty or ill-timed fuse, and when Ledrans recovered consciousness his body was swathed in bandages; there was a sickening odor of chloroform and antiseptics in the room and his right arm was gone at the elbow; his left halfway between the elbow and the wrist.

In the little village of Champcervons, on a blue sweep of La Manche, where the white gulls volplane twixt the white cliffs of Dover and the yellow sands of France, there is a neat farm. Its fields are ripe with golden wheat at harvest time, its orchards pink with blossoms in the spring. The farmer's wife is a sunny-haired girl who sings at her work. The farmer is a slim dark-eyed young man who has no hands. His name is Ledrans.

Ledrans typifies the spirit of unconquerable France. When he discovered that the accident at the grenadier school had left him practically helpless, did he mourn his fate and fall back on public charity? No. As soon as his wounds were healed, Ledrans entered one of the re-educational schools for maimed soldiers, and with the aid of artificial arms soon learned to handle the implements of the farm as easily as he had done in the old days.

And it is the policy of France to send as many of her maimed soldiers as possible back to the land—first, because it is by far the most healthful occupation they can elect, much to be preferred to that of a watchman in a dark, stuffy building or any sort of machine work in a factory for which the *reformé* may be fitted; secondly, because the production of foodstuffs is a vital need of France, and thirdly, because many thousands of the fighting farmers now with the colors will never come back. They will have given their all for France.

As in America, the trend of the rising population, before the war, had been toward the cities and the great industrial centers. Human nature differing very little the world over, the boys of France had heard the siren song of the cities where wealth abounded, and had chafed under the monotony and quietude of the farm. But now, France must have food; she must have it right at her own doors. So facing this double problem—the problem of production and that of the future of the maimed soldier—the French Department of Agriculture has established a series of re-educational institutions for instruction in agricultural pursuits.

Of these, one of the most efficient, in point of equipment, method and results obtained, is the supplementary agricultural school at Grand-Jouan (Loire-Inferière, a seacoast *département* of France), although the National Agricultural School at Grignon is much larger. Both of these institutions embrace in their curricula courses in agriculture, horticulture, gardening, basketry, sheep-raising, and farm mechanics.

Let us sketch briefly the career of a *mutilé* from battlefield to farm. He is convalescent in the base hospital following the amputation that may have robbed him of one or two legs, arms, or hands. In addition to the physical shock suffered by reason of the injury and subsequent amputation, he is in a state of mental collapse varying in graveness according to the temperament and mental stamina of the soldier. Along with the cure of the flesh must go the healing of the spirit, a happy mental readjustment to the patient's new condition. Never for a moment must his morale be permitted to flag. The science of lending this indispensable moral aid to those suffering from severe shock and mental discomfort is called psychiatry.

Photograph from the American Red Cross

Although these five men have only five good arms, with the aid of artificial ones they are able to accomplish very difficult work

As soon as the healing of the wound is completed, the patient spends a certain number of hours each day in the orthopedic ward that is attached to all big French hospitals. Here the patient exercises the remaining portion of the amputated member, restoring the function and strength of the disused muscles. This period is known as "functional restoration."

After all that it is possible to do has been done for him in the orthopedic ward, the patient is fitted with temporary artificial limbs and parts and makes ready to enter the re-educational school in his *departement*, although in many cases functional restoration and professional re-education go on simultaneously, in so far as it is possible.

Candidates for professional re-education are placed in the schools nearest their homes, for the French people, above everything else, are home-loving, and family ties must be kept as close as possible if the soldier is to maintain his courage and remain cheerful and happy and contented. The patient's state of mind has so large a bearing on the cure and success of the experiment that it takes but a small stretch of the imagination to appreciate the mental and physical strain that the soldier undergoes in his orientation to useful life.

The course that the pupil is to follow is carefully mapped out and handled by competent instructors. Theory and practice go side by side. Many of the pupils are practically illiterate when they enter the schools, and before the theoretical side of the course can be presented the pupil must receive instruction along the most elemental lines to insure his intelligent understanding of the instruction he is to receive.

This is usually given in terms of the particular branch of agriculture the pupil has elected to pursue, and after a few weeks of diligent and patient study he suddenly finds himself assuming new interest as foreign fields grow more and more familiar and as inviting doorways of exploration and experiment open before him.

At Noisy-le-Grand there is a school of farm mechanics where hand labor is replaced by machine—the American tractors, harvesters, binders, etc., coming into their own under the operation of the *mutilés*. Indeed, the coming of the *mutilé* bids fair to revolutionize the agriculture of France, and do away altogether with the slow though picturesque methods of ante-bellum days.

In this type of farm labor lies perhaps greater monetary profit than in any other. The skilled farm mechanic, one who understands the theory and practical use of his machines, one who can do his own repairing, can demand a salary equal to that of a skilled mechanic in the city. A one-legged *mutilé* can easily learn the operation of a reaper, binder, or tractor, and in some cases, provided the upper arm is intact, a *mutilé* minus his forearm can become as skilled.

In this the task of the persevering *mutilé* is twofold, for not only must he learn the operation of the machine in his charge, but he must also as skillfully and easily manipulate his artificial arm or limb. And so, after many weeks of study and effort and untiring patience and will on the part of both pupil and teacher, behold the "new man" of France, remade in body and spirit, imbued with self-confidence and a knowledge of his own worth, with a will to live and work, and often finding himself better off as a *reformé* with a useful calling at his command than he was before the war.

The *reformé* is now ready to go out into the world again and take his place among men. He is equipped with the very best quality and the most up-to-date type of artificial limbs and parts, perfectly fitted and adjusted to his individual needs. One of the largest artificial limb factories in France is now operated and controlled by the American Red Cross, which is taking a keen and practical interest in re-educational work for the French soldiers as well as the American. The American Red Cross farm at Courbat is now in operation, equipped to accommodate 125 *mutilés*. This covers 160 acres, and is supplied with American [CONTINUED ON PAGE 29]

Photograph from the American Red Cross

In the re-education process, theory and practice go side by side

FARM AND FIRESIDE

The National Farm Magazine

Founded 1877

Published Monthly by

The Crowell Publishing Company

Springfield, Ohio

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By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

OCTOBER 1918

If Your Copy is Late

YOUR copy of the magazine may be a little late these days because the railroads are congested with troop trains and shipments of war supplies. Be patient, therefore; you will get your magazine after a few days' delay—at the very most.

Our Share of the Loan

THE opportunity to share in the Fourth Liberty Loan has come to us. Every person who has either income or property wants to do his part in answering this call.

Civilization has the spirit and the will to protect itself against the domination of German militarism. The evidence is rapidly accumulating that the civilized world will crush Germany. To do this it is only necessary that we keep at the job. This means that we must support the call for six billion dollars in the Fourth Liberty Loan, everyone doing his share.

But what is the fair share of each of us? Most men will do their share if they know what it is. Of course, for those who have already decided this question in connection with previous loans, the matter is simple, because the man who lent his country $300 when three billion dollars was called for will now take $600 of the bonds to be issued in the Fourth Liberty Loan. Thus, after having once established what is our fair share, we make our loan to the country in direct proportion to the country's call.

In round numbers, there are 100 million people in the United States and the call is for 6,000 million dollars, or $60 for every person—man, woman, and child. This would amount to $300 for the average family owning the average amount of property or receiving the average income. But the Government of the United States has the most complete information as to population, property, and income; and when the country calls for a definite number of men or a certain amount of money from a town or township, then we can more easily ascertain what is the fair share of each.

The first duty is to ascertain what this is; and the second, to order our affairs that we can meet the country's call. Those who give themselves to the battle front offer their all to the cause of civilization, and those who remain in civil life must not do less than meet the call for support by contributions and loans to the utmost possible limit of income and credit if necessary. "Is not the life more than meat, and the body than raiment?"

Next Year's Corn Crop

SINCE in many places the corn crop was seriously injured by drought, careful selection of seed is even more important than usual. To a greater extent than any other plant commonly cultivated in America, the corn plant becomes adapted to a particular locality, and seed from that plant will not grow so successfully under even slightly different conditions. There is a certain variety of corn that is best for a certain region—usually a small region—and within that variety there are slight differences which adapt the strain to still smaller localities.

For this reason it is highly desirable for a man to get his seed from his own farm if possible. If he is getting good yields, he knows that the seed is adapted to the conditions that exist on his place. The sure way to select good seed is to go into the field and choose it from the standing stalks before the crop as a whole is harvested. By this means one has the opportunity to observe the plant and conditions under which it grew. A good ear on a plant in an exceptionally favorable location is less valuable for seed than an ear of equal quality from a stalk growing in an average or an unfavorable location.

Furthermore, early selection gives a chance to care for the seed through the winter in the best possible manner. All that the seed needs is a dry place, properly ventilated, where the ears may be fastened in such a way that they will not touch each other in drying.

This year it will be worth while to gather considerably more seed corn than one will probably need for seed. One should always allow for ears which will show poor germination. Thirty per cent is a safe allowance. In addition to allowing for germination, one should take into consideration the possibility that one's neighbor may want seed.

If there are farms in the vicinity on which the crop was a failure, the owners will be in the market next spring for seed corn. They should not have to go outside of their county. If they do, it probably will mean lower yields, whereas the highest possible yields are the demands of the hour. The man with a field from which good seed may be selected has not only a sound business opportunity, but also a chance for patriotic service.

Work of the Grange

THE Grange is sometimes criticized as being excellent in social and educational qualities but indifferent in business enterprise. Nevertheless, there are shining examples of business efficiency among the Patrons of Husbandry.

A report from Dexter Grange, Penobscot County, Maine, shows that it began six years ago with a stock of groceries, feed and flour costing $4,000, which has increased to a $9,000 stock in addition to paying for its several store buildings. Its present capitalization is $10,000, all paid in. The weekly average sales now amount to more than $2,000.

Beware of Bogus Stocks

THE wily, smooth-talking stock salesman is abroad in the land. He has singled out the farmer as his victim. He is using the Liberty Bond as one of his baits. Already millions upon millions of dollars of worthless and well-nigh worthless stock has been sold to farmers, Liberty Bonds being frequently taken as part payment.

The situation is so serious that the Treasury Department has issued a special warning against exchanging government bonds for any other paper collateral. Yet the evil continues almost unabated.

Prior to the United States engaging in the great war, there were perhaps 300,000 men and women in the country who were in the habit of investing their money in stocks and bonds. The great majority bought land or land mortgages. To-day there are something like 18,000,000 bond buyers in the country, that number having bought the Third Liberty Loan issuance.

These patriotic investors are the mark at which the unscrupulous stock salesmen are aiming. In many localities they have actually secured complete lists of Liberty Bond purchasers. They are making a practice of calling upon these investors and offering to exchange stock which they verbally declare will earn anywhere from 12 to 25 per cent a year for the Liberty Bonds, which earn but 3½, 4, and 4¼ per cent.

Practically all of these promoters are working on a commission basis. They are paid from $20 to $50 on every $100 worth of stock they sell. When the entire capital stock of the corporation is sold out, the capital stock is increased.

There are many interesting records to prove that one concern, confining itself almost wholly to farmers, originally incorporated for $750,000, and when this amount of stock was sold it amended its articles of incorporation so as to increase the capital stock to $10,750,000—thirteen times the original amount.

The farmer has learned not to buy gold bricks; he no longer falls victim to the lightning-rod swindler. He must learn to beware of the smooth-talking, slick-appearing stranger who drives up to his house or the field where he is working, opens up his leather portfolio, displays a gaudily colored prospectus, reads a letter of endorsement from banker or state official and then offers him stock said to pay anywhere from 10 to 50 per cent annually, but which is often hardly worth the paper it is printed on.

When to Plant Trees

IN MANY regions there is under normal circumstances little choice between autumn and spring as a season for transplanting fruit or other trees. In warm climates, fall is commonly preferred to spring, because the heat of the soil at that time is a stimulus to the growth of roots.

Last summer, however, in numerous places was not a normal one. Many parts of the country suffered from a serious deficiency in rainfall, particularly in the middle and latter part of the summer.

This deficiency in rainfall will be a serious handicap to trees that are set out this fall. Effective growth depends considerably upon the supply of water in the subsoil. If this supply is low the trees will get a poor start.

In regions where there has been ample rainfall in the summer, and where fall planting is customary, the usual practice may be followed successfully this season. If there has been insufficient rainfall, however, or if doubt exists on any other score, it will be preferable to postpone planting till spring.

For a Greater Effort

ONE of the Midwestern States, which has long led in corn but which has never been counted in wheat has a new slogan. It is this: "A million acres of winter wheat." Last fall this State sowed 450,000 acres to winter wheat; in the spring something like 50,000 acres were abandoned. It harvested a crop averaging 20 bushels to the acre from the remaining 400,000 acres. If it sows a million acres to winter wheat this fall it will be putting two and one-half times the normally harvested area to this crop.

There is a lesson in the endeavors of this State for every one in the Union. Last fall, winter wheat was sown in 39 out of the 48 States. The only ones which did not go in for winter wheat enough to warrant their being included in the Department of Agriculture's report were Vermont, Massachusetts, Connecticut, Florida, Louisiana, Maine, New Hampshire, Rhode Island, and North Dakota. Of these States, North Dakota is the only one which figures heavily in field-crop production.

Barring these nine States, however, winter wheat was a crop of varying importance throughout all the Union. The area sown to it ranged from 5,000 acres in Nevada and 34,000 acres in Mississippi, the minimum, to 6,730,000 acres in Kansas, the maximum. Assuming that every State among the thirty-nine went into the matter as whole-heartedly and as patriotically as the one which proposes to increase its winter wheat area this fall two and one-half times, we would have such a bumper wheat crop as the world never knew before; there would be bread a-plenty for fighters and soldiers alike.

The ratio is a possible one for many States. There is hardly a person who reads FARM AND FIRESIDE but can make his acres yield not only more than they have been yielding but can cultivate a few more acres or take care of a few more animals. The boys "over there" are doing the impossible; it is up to us "over here" to do likewise.

We may not all of us be able to do two and one-half times as much as we are doing now, to produce two and one-half times as much as we are producing now; but isn't it worth trying, particularly when the news from the battle line is so good just at the time of the year when the farmer looks out over his fields and sees that what he has done is also very good—a prime factor in bringing victory to perch upon our banners?

Fur Flying Skyward

THE multiplying need of fur-lined jackets for air fighters at the front is skyrocketing prices for muskrat and other similar furs to points undreamed of in the past.

Coyote pelts that in pre-war days brought $1, this year are commanding $15 to $18 a pelt for shipment to English clothing manufacturers. Canada will furnish close to a million and a half muskrat skins for the same purpose, these small furry hides being particularly well adapted for lining the outer garments of airmen.

Even should the war be concluded sooner than our government officials now believe possible, the production of fur-bearing animals will have become so well established as an economic commercial business as to insure the future use of considerable areas of waste land for this purpose.

As the business of breeding fur-bearing animals continues, there is good reason to believe that the domesticating and refining effect of man's influence will result in a new and popular source of clothing from these former denizens of lake, stream, plain, and forest.

One Road to Happiness

How a tractor enabled one man and his son to do more work, gave them and the rest of the family more time for recreation, and saved $588 the first year

By H. H. Haynes

"HOW is the plowing coming on that back eighty, Jim?"

"Fine. I'm going to try and finish there by to-morrow noon."

"Engine working all right?"

"Hasn't made a miss so far. I tell you, Father, it's fun to farm with a tractor. I used to hate to spend so much time taking care of horses after I got in from the field at night, but with the tractor I just shut off the gasoline, give the machine a good looking-over, and I'm through for the day."

Happen in at most any farmhouse about supper time, and if there is a tractor in the family you will hear father and son talking over the day's work, and if, as Jim says, there was some "fun" in it, you may be assured that they are also happy and contented.

In handling and taking care of a tractor, Jim found that there was much more to this business of farming than he had thought. In the past, horses were used for all the work on the farm, and he was fast becoming tired of the day-to-day monotony. He took pride in his team, but something was lacking. The work held very little interest for him.

Jim's father was an up-to-date farmer. He employed the latest farming methods, his equipment was of the best, and he was eager that Jim take the farm and keep on where he left off. He had noticed for some time his son's apparent lack of interest. The boy did what was expected of him, and did it well; but there was no enthusiasm nor pleasure shown in his work. Something was wrong.

One day his father, looking over some recently purchased stock, noticed that Jim had tied his team to the fence, and was fast disappearing over the hill toward a neighbor's. That evening he asked Jim where he had gone.

"I went over to Seth Johnson's. His father bought a tractor. The agent brought it out this afternoon, and was showing them how to run it. It sure is a dandy, and Seth says his father is going to let him run it and take care of it. Gee, but he's lucky!"

While Jim was talking his eyes shone, and his voice quivered with excitement. Right there Jim's father had a hunch. If by investing in a tractor he could hold his boy's interest in his work, he would consider it money well spent.

Fitting the Power to the Farm

ON THE other hand, he did not look at it merely as a means of pleasing his son. His whole operation of farming would be benefited by the saving of labor and time that a tractor would effect, and any improvement on those two factors would make him money. Jim, still lacking the foresight that comes with mature years, saw only the immediate pleasure to be derived and was satisfied. His father took the more businesslike view of increased efficiency and production, which, indirectly, meant happiness to him also.

The following Saturday afternoon found Jim and his father consulting a local tractor dealer. They had their minds pretty well made up as to the make they were going to buy, for in their previous discussions Jim showed that he had spent considerable time reading advertisements and descriptions of tractors.

The result was that they bought a tractor developing from 12 to 15 horsepower on the drawbar, and capable of handling any of the belt work which they would have to do. Their farm consisted of 240 acres, and they figured that a tractor of this size would give them all the power they would need, with some to spare. The "power to spare" idea is one that every farmer should consider before he buys. Many owners demand more of their tractor than they should, and then wonder why the different parts show wear so quickly. Jim's father took into consideration all the possible uses he would be able to make of the tractor, and then bought accordingly.

The advent of the tractor created quite a stir in the family circle. Mother and the girls were just as interested as the men. They had owned an automobile for some years, and it fitted into their everyday life much the same as the telephone or the rural mail delivery. But the tractor was different. Its possibilities were as yet unknown.

The tractor will furnish dependable power for sawing wood, grinding corn, or filling the silo

To Jim it stood for power in the fullest sense of the word. Its strength seemed huge, and as far as he was concerned there was nothing that it could not accomplish. The hum of its engine when idle he likened to the whispering of a giant, and when it settled down to a steady pull its roar was music in his ears.

Jim's father realized that, to get the most on his investment and to make the tractor earn its keep, it would be necessary to use it in every possible way. Plowing, of course, was the essential job, and rather than use his horse gangs, which were much too light for tractor use, he traded them in on a three-plow tractor gang.

Machinery for seed-bed preparation, such as disks, harrows, and rollers, he had already, and by changing the hitches they were easily adapted to the tractor, as was also the grain drill. Planting corn was left to the horses, but by a special hitch, pulling one two-row and two one-row cultivators, the tractor did all the cultivating and was able to do it oftener and better than the horses.

By using the tractor on the hay loader and having an extra rack at hand, two teams were available for use on the mower and side-delivery rake. They were able to keep far enough ahead of the loader for the hay to cure, and even though the weather was bad at times the tractor's rapid work while the sun was shining put the hay into the barn in fine condition.

But it was during harvest that the tractor showed to best advantage. The heat and long hours are in many cases more than horses can stand, and their failure to respond to the hard work comes at a time when speed and long days count for much. Being able to cut grain at the right stage of ripening means a great deal when one is figuring the number of bushels harvested per acre.

"Why not rig up that old binder in the machine shed?" said Jim to his father. "It's only a six-foot cut, but the tractor has plenty of power to pull it, and the new binder too, and we can cut just that much faster."

"All right," agreed his father. "We'll see what repairs it needs, and if it looks as if it would do the work you can hook the old one behind the eight-footer. If it turns off hot after this rainy spell the grain will ripen mighty fast."

The grain did ripen fast, much to the sorrow of several of their neighbors who had to depend on horses, but with the tractor and the two binders Jim and his father cut it in great shape. They lamented the fact that the tractor wasn't able to shock the grain as well.

Indirectly, Mother and the girls benefited quite as much as Jim and his father. Before the tractor came it was necessary for the two men to spend several hours at night doing chores. They didn't feel much like taking a short ride in the car or a trip to the movies. Their work in the field had been strenuous, and extra time was needed in the evenings in order to keep the horses fit. Small wonder that neither of them felt like doing anything but going to bed after the day's work was done.

Work Done Quickly and Well

THE tractor changed things. The work was accomplished much faster. More could be done in a shorter time. Jim got pleasure out of doing the work, and Father got the same thing out of seeing it done so quickly and well at small cost. Evenings were looked forward to. Sometimes it was a trip to town for an ice-cream soda or the movies, or again a visit with lively games at a neighbor's. Occasionally they all went on a picnic, because they knew the work was right up to the minute and could be easily kept there. No one had a guilty feeling that he was slighting his duty.

After finding out the value of the right kind of equipment toward his own operations, Jim's father immediately set about making the work easier for his wife and daughters. Changes were made that would save them many steps in the course of the day's work, one of which was the installation of a complete plumbing system with a modern home laundry in the basement. Many of the rooms were made more cheerful by papering and redecorating.

The amount of work the man and boy were able to accomplish that summer was surprising. Jobs had loomed big ahead of them, but all had been overcome, and often at times when extra help was not to be had. Not only were the various farming operations done more quickly, but they were also done more thoroughly. Having plenty of power resulted in deeper and better plowing, and in a more finely pulverized seed bed.

The ability of the tractor to handle several implements at once lowers cost of crop production

While Jim's father was more than pleased with the work the tractor was doing, he had not lost sight of its economical value as compared with horses. In discussing this with his son one evening he said:

"While you have been operating and taking care of the tractor, I have been doing a little figuring on what it has saved us during the year. It has demonstrated that it can do the work of at least ten horses, so I am taking the upkeep of ten horses doing the same amount of work as a basis. I have found that these horses will eat about 350 bushels of corn, 125 bushels of oats, and 30 tons of hay. At present prices this feed will total close to $1,088.

"Now we'll take the tractor. You will have used, by the time fall plowing is

[CONTINUED ON PAGE 29]

The Puncture Fixed—
You're on Your Way

Goodyear Self-Cure Tube Patches—easily applied—effect quick, roadside repairs

WHEN you're forced to repair a punctured tube on the roadside it's good to know there's a supply of Goodyear Self-Cure Tube Patches in the tool-box. These handy, die-cut patches come ten in a little tin box. They are tough rubber discs that stretch evenly with the tube. Applied with Goodyear Patching Cement, they hold tight and will not pull loose at the edges. Always keep a box of these useful patches handy. Some day you may need them to bring you home.

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GOODYEAR
AKRON
TIRE SAVERS

Making Beef with Silage

How you can get much cheaper gains on your fattening cattle

By Thomas J. Delohery

"FARMING without a silo would be difficult for me. I have two silos, and am thinking of building another. In a few years nearly every farm in Clinton County, Iowa, will have a silo," said August Diericks. "My silos paid for themselves last year, because the corn I put into them would otherwise have been unmerchantable, and unless I had had a lot of stock to which I could feed the corn it would have rotted."

This man marketed a load of cattle which he made on silage, corn, and oil meal, and realized a profit. His cattle were not prime, but were the half-fat, short-fed steers which are making money at the present time, and which will continue to make money until the war is over. The government demands are for this class of beef, so that competition is keen and prices for this grade of beef are considerably higher than prime cattle.

Last summer, when cattle were selling at the highest price on record, I happened to be talking to Roy Graven of Greene County, Iowa. His cattle sold rather high, but despite this he was not optimistic over the future of the cattle-feeding industry. I found him sitting on the fence of a pen watching buyers bid for his stock.

"I'll make money on these steers," he said; "but in the future we feeders must rely on silage, straw, hay, and cheaper feeds. Grain is getting entirely too high; and the market will not compensate us. I expect that many feeders will lose money because feeding cattle are selling too high and this market will decline."

Just as he predicted, the market did decline and feeders lost money. It is no secret that losses were many. The reason for this was the high price of cattle and feeds and the decline in the price of the finished product.

Very few feeders of the poorer grades of cattle lost money, because the price of this stuff has not fluctuated much. Moreover, this stuff will continue to bring comparatively more money than the best grades of beef.

C. H. Rider of Muscatine County, Iowa, has a method of making beef that is a money maker. I met him on the Chicago market, where he was going to buy a load of feeding cattle.

"I'm going to buy 1,000-pound steers," said Mr. Rider. "I want cattle that have plenty of bone, carrying a minimum amount of flesh, and of fairly good quality. I will feed these steers about three months, marketing them in June, when the trade begins to get good.

"For the last few years I have been feeding my steers on a daily ration of 40 pounds of silage, 2 to 4 pounds of cottonseed meal, and 2 to 3 pounds of corn. I have found this a profitable method, and will continue to make steers in this fashion. Moreover, the cattle I have fed average about three pounds of gain a day.

"My silo has a capacity of 215 tons. I filled it from 20 acres of corn, which ran about 60 bushels an acre, but which was so soft that outside of silage and turning the stock into the field it was worthless. I figure that it costs me around $7 a ton. The corn I will feed is worth about $1 a hundred, and the cottonseed meal $54.50 a ton, so that the daily ration will cost around a quarter a day. This will make beef at about eight cents a pound.

"I use my silage for spring and summer feeding because my land is too high-priced for pasture. In the winter I feed straw, fodder, and hay, so I don't need the silage."

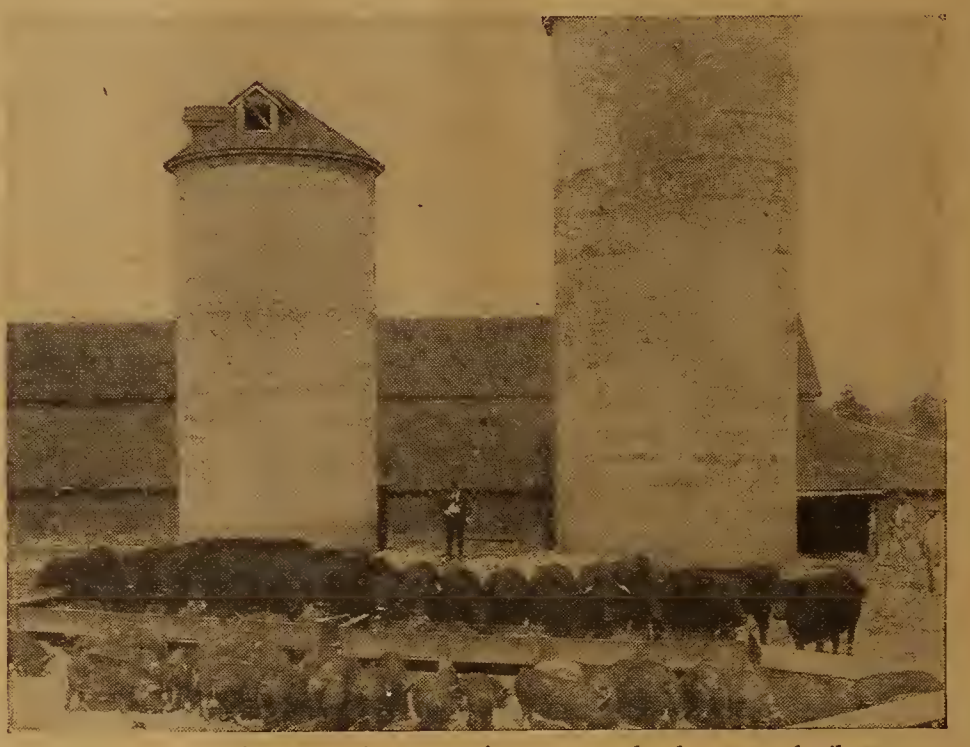
The reason why the producers of the best cattle have been losing money can be found in the following statement by Joseph P. Cotton, chief of the Meat Division of the Food Administration:

"There has been a decline in the price of the highest grade of cattle. Some farmers who paid very high prices for feeding cattle will lose money. We are powerless to increase the demand for the most expensive beef. On the other hand, the orders from the allied nations for beef of average quality are such that the Meat Division expects no decline in the present price of cattle of medium grades, which constitute the great bulk of the supply.

"A decline in those prices would tend to lessen essential production. Farmers will find half-fat and short-fed cattle more profitable than those fed to produce the heaviest weight and highest quality. If you do not make this change your losses will drive you to it."

Silage is one of the biggest factors in the production of pure-bred and market cattle on the farm of W. H. Hurdle of Holly Springs, Mississippi.

"I have bred, raised, and sold from land that cost me from $10 to $25 an acre as good Angus yearlings as are generally sold from the Northern land that cost around $200 an acre," he said. "By crossing pure-bred Angus bulls on native cows I am able to get calves which, when fed liberally on silage, cottonseed meal, and corn, bring good results.



A good combination for most farms—cattle, hogs, and silos

"Last June I marketed a drove of cattle at the St. Louis market which brought $12.40, making a new record for Southern cattle. These cattle were wintered on silage and cottonseed meal from November 15th to March 1st, from which time they were on a ration of silage, cob meal, cottonseed meal, and a little hay."

Various experiment stations have found that silage cut the cost of production as much as $4.35 per 100 pounds, and that it is far more valuable than fodder. In Canada it was observed that silage substituted for hay would save $63 of every $200 invested in feed.

On lands that are extremely valuable, silage can be used as a substitute for hay. In Indiana it was found that the addition of silage to the ration obviated the necessity of feeding clover hay when the ratio was made up of corn and cottonseed meal, with a saving of more than four cents a pound on the gains made.

Out in Whiting County, Iowa, on the Walnut Ridge Stock Farm, famous for its baby beef, silage is solidly imbedded in the ration for the calves, and when the pasture dries in the summer it is fed to the cows.

"Experience has taught us that when a calf has been grained through the winter," said Mr. Cassidy, the owner, "he gets a setback if put out in pasture in the spring. This has happened to us several times, so now when we start to feed a calf in the fall we feed it silage as a succulent feed until marketed."

Aside from being an ideal beef maker, Thomas Convey of Ridgeway, Wisconsin, says that a silo with a capacity of 100 tons will hold more feed and occupy less space than a barn which will hold 100 tons of hay. Moreover, silage is not affected by the rain when being harvested—that is, the corn—whereas, after hay is cut it is always in danger of being rendered useless.

"Silage," said Mr. Convey, "has proved its worth as a beef maker; moreover, there is no question as to its desirability. Two silos on a farm will take the place of pasture when the land is high."

Feeders are coming more and more to silage as a means of making beef. Talks with many stockmen show that the silo is becoming more and more popular, and that every year finds a greater number in every district where beef is made.

Bankers Buy Live Stock

By D. T. Gray

THE part that banks can sometimes play in fostering the live-stock business is illustrated by the action taken by banks and groups of banks in the South. At Moultrie, Georgia, the farmers felt that a creamery should be established, but a sufficient number of cows were not available, so an appeal was made to the local bankers. As a result the banks bought 12 cars of milking cows, the local county agent making the purchases.

When the cows arrived at Moultrie they were divided among the interested farmers, each farmer paying upon delivery only one fourth of the purchase price of the animals. The remaining three fourths is to be paid as the cream is delivered to the creamery. Each month the manager of the creamery sends one half of the cream receipts to the farmer and the other half to the bank.

Until the whole amount is paid the cows are under the general oversight of the county agent, who visits the owners at regular intervals, advising them as to best methods of feeding and caring for the cream.

A short time ago a small group of farmers in Gibson County, Tennessee, started a movement looking toward diversification of crops and the introduction of more and better live stock. This plan is working out very well.

Because of a lack of funds among the farmers, an appeal was made to the banks of the county. The banks immediately became interested, and as soon as the farmers were ready to bring in a car of cattle the bankers agreed to lend $15,000 to pay for them. Sixty-four head of bulls, cows, and calves were brought to the county.

All of these cattle were distributed to individual farmers, not more than three going to any farmer, when the owners either paid for them or gave long-time notes at reduced interest to the banks. One bank acted as agent for all the banks in the county.

In North Carolina twenty banks became interested in the pig-club movement and assisted very materially in encouraging and fostering this movement among the boys and girls. These banks advanced, during the first year, $3,416.50 to boys and girls, all of the money being used in the purchase of pure-bred breeding pigs. In this way one bank put out 50 pure-bred pigs.

In each case the banks worked through the state agent in pig-club work, or the local county agents. Arrangements were made for these men to buy the pigs and to instruct the boys and girls on the proper care and feed for the pigs. The pig-club plan has made a big success.

Lights for the Home

By R. B. Rushing

DURING the strenuous days of summer and the hurrying days of fall the farmer and his family do not feel like reading far into the evening, and the ordinary lights which are available may answer the purpose very well. But during long winter evenings the case is quite different, and it is very desirable to have the house well lighted.

Very few farmers as yet have their homes equipped with good lights. A few have installed gas plants, a good many have the improved types of lamps, and a few have electric lights, but a great majority are getting along with inadequate lights for the home.

The question of lighting becomes an important one for the rural household, and nothing has so nearly approached its proper solution as the gasoline and electric lights which have been produced for farm homes within the past comparatively few years.

The gasoline type of lamp affords an inexpensive and desirable means of lighting homes, and when compared with the cost of installing some of the more expensive lighting apparatus, the advantages are greatly in its favor. Heretofore the most common style of the gasoline lamp was the single burner with its independent reservoir, but within the past few years it has been possible to buy either the individual lamp arranged in systems with a central reservoir or generator which supplies fuel to every lamp in the house.

Either one of these types is suitable for the farmer who wants to make some immediate arrangements for better lighting of his home, and either the lamp or the system is so easy to put in place that it can be used the same day it is received from the manufacturer. In fact, with this style of lighting it is not necessary to deface or mar the walls or ceilings or any part of the room, and the system can be put in place by almost any man who is handy with a screw driver.

From my own experience with both, I prefer electric lighting. I can extend it to any part of the house or barn and have a light which is not dangerous at my command at all times, either in good or bad weather; but the cost is considerablly more, and just anybody can't install the electric lighting system as easily and as successfully as he can the gasoline system.

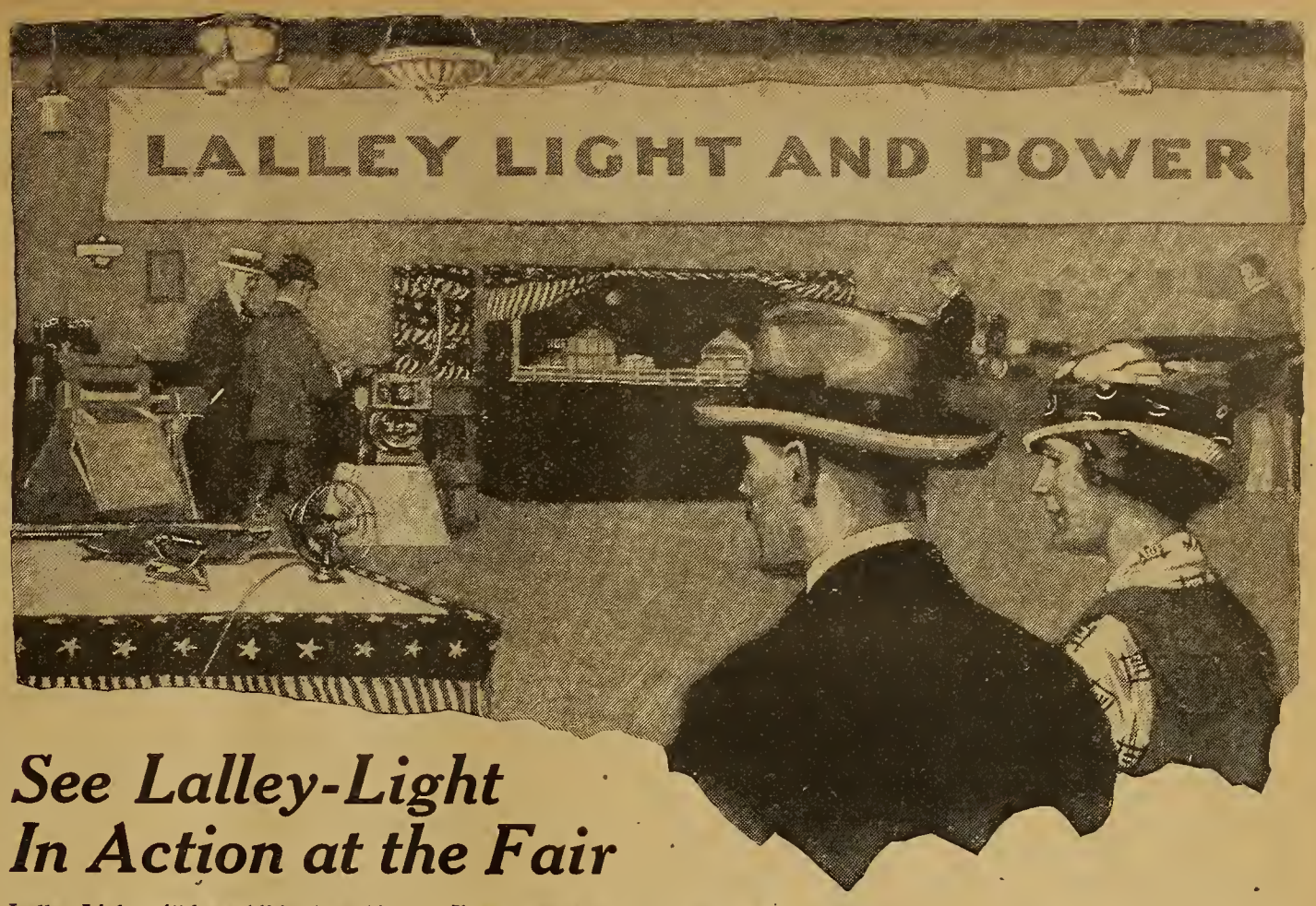
Personally I like the light given by the electric lights better than I do the gas; however, the gas does make an excellent light.

If you have never tried it out in your own home, just imagine for a moment going into your bedroom and having instantly all the light you want. Think of coming home at a late hour in the night or going to the barn or the dairy and hunting up an old oil lantern, then change the scene and just go to the gate first, turn a button and have plenty of light there, then at the barn door

Electricity supplies power as well as light

another button, and in the hallway another, and you have light all the way from the gate into the stalls.

Since I have put in electric lights in all my buildings, after supper I and my wife and children go into the library, and there are two lights, high enough to be out of reach of our heads. Turn a button and the light is in every corner of the room—light coming from above, just as the sunshine does, and a light that does not tire the eyes. Most lamplights are very tiresome and hard on the eyes. We greatly enjoy reading by this light, and it has never given us any trouble with our eyes. I do not consider any farm home complete without some up-to-date lighting system.



See Lalley-Light In Action at the Fair

Lalley-Light will be exhibited, and in operation, at most of the county and state fairs this fall.

We ask you to note particularly the way it runs, and the character of the electric light and power it produces.

If you will do this, we count on the plant itself to convince you of the superiority it has proven in eight years of every day farm use.

You probably will be impressed, first, with its extremely smooth running; and the fact that a low hum is all you hear when it is running.

You will see that the electric lights are strong and steady all the time—without even a suggestion of a flicker.

You will observe, also, the same steady flow of power to the electrical machines which may be exhibited.

The men in charge will explain that Lalley-Light furnishes light and power from two sources—the storage battery; and the generator, independently of the battery.

That means with Lalley-Light you are doubly sure of having light and power.

Even if you are not of a mechanical turn, you can't help admiring the unusual simplicity of the plant, and its very compact design.

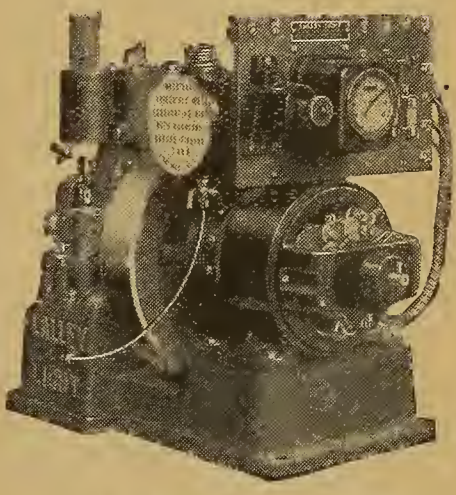
We urge you to study Lalley-Light, because it points the way to a great saving of farm labor and an equal increase of comforts and conveniences on the farm.

Next year the farmer's need for Lalley-Light's reliable, economical power and light will be even greater than this year.

You should prepare now to meet that need.

If Lalley-Light should not be displayed at your home fair, write to us for details and name of the nearest Lalley-Light merchant.

Lalley Electro-Lighting Corporation
761 Bellevue Ave. Detroit, Mich.



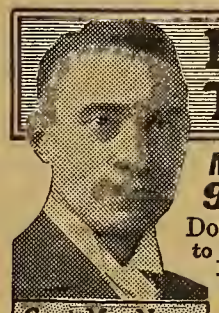
Generating plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

LALLEY-LIGHT

THE ELECTRIC LIGHT AND POWER FOR EVERY FARM

IT didn't take Mother Earth long to decide on the Ball as the best shape for long life. Mechanics have been a little slower, but they know now that the ball makes the best bearing. When most carefully made they are called

Hess-Bright Ball Bearings



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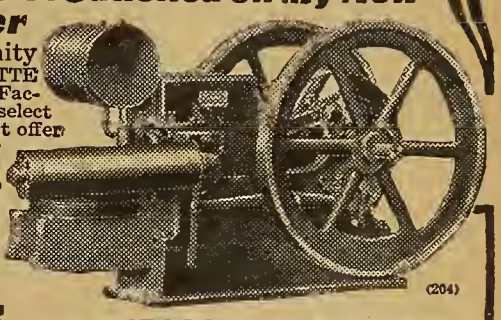

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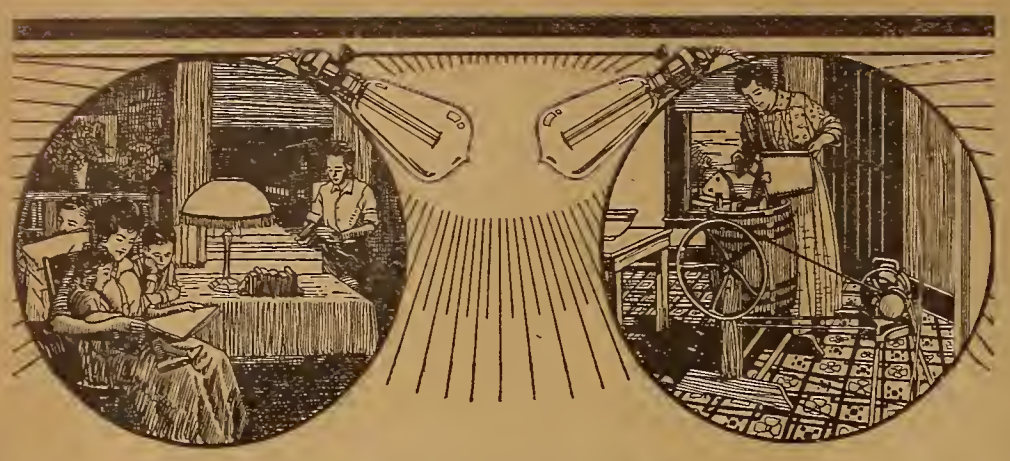
DELCO-LIGHT
INCREASES FARM EFFICIENCY



Delco-Light in the Farm Home Means:

An abundance of clear, bright electric light throughout the house and barn.

Running water in house and barn. A modern bath room, fire protection. No laborious pumping.

Economical power to operate the washing machine, the churn, the cream separator, the vacuum cleaner and other small machines.

It means increased profits in time and labor saved.

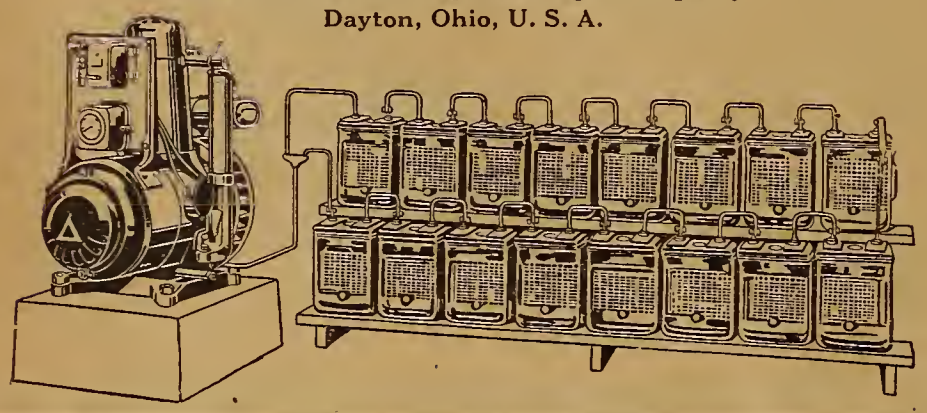
And a home that has in it the comforts and conveniences usually found only in the city.

Delco-Light is a complete electric light and power plant for farm or country home. It is self-cranking, air-cooled; ball bearing. Has thick plate, long lived storage battery. No belts.

RUNS ON KEROSENE

There is a Delco-Light man in your locality. Write for his name and for the new Delco-Light book.

The Domestic Engineering Company
Dayton, Ohio, U. S. A.



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The Farmer's Concrete Mixer
SHELDON Batch Mixer
Price $11.50 Up

The Sheldon was designed especially for the farm. Highly praised by users. Farmers everywhere call it the ideal mixer. Used today all over the United States. A big success. Small enough to be easily moved—big enough to keep 6 men busy. Low in price. Build your own silo, tanks, troughs, floors, foundations, buildings, etc., out of concrete with a Sheldon Batch Mixer.

Read What These Sheldon Owners Say

I and my hired man laid a feeding floor for my hogs, 24x24, in one day; also put floor in my cow barn. My neighbor liked it so well I am not able to keep it at home.—ANDREW CHRISTENSEN, Hancock, Minn., Rt. 1.

We have used the mixer during past year for putting in cement foundations for a complete set of farm buildings, including silo, and like it very much.—DANA WRIGHT, Jamestown, N. D.

Last year I bought a cement mixer from you with which I am well satisfied. It did not take long for it to pay for itself and I surely can recommend it to anyone needing a *big mixer at a small price.*—WM. PARKS, Martinton, Ill.

I am more than busy with my Sheldon Concrete Mixer. Have more work than I can do. *I get $10 a day when I work out.*—JESSE L. WITTER, Wellsville, N. Y.

The machine works fine. Have already *got the job* of mixing concrete for the bridges in this township.—JOHN ROSE, Spartansburg, Pennsylvania.

Last spring we purchased of you a set of castings to make a concrete mixer. It was constructed per the plans furnished and it *surely worked great.*—D. M. BRUBAKER, Freeport, Ill.

FREE PLANS

Make your own concrete mixer. You can do it at a cost so low you can not afford to mix concrete by the shovel method. Along with our iron parts we send Free Plans and permit for making your own machine. A good way to get a practical mixer at a small expense. Or we will sell you the complete machine, ready built.

Make Big Money at Concreting
If you buy a Sheldon Mixer for your own use, you can make many times its cost in a season by renting it to your neighbors. Or, if you want to go out with the mixer on contracts, you can easily earn $8 to $20 a day. Our customers are doing it right now. The jobs go to the man with a Sheldon Mixer every time.

Write for Our New FREE Catalog
Shows our full line of mixers which are sold direct to you on strong guarantee. *Thirty days' trial* privilege. No other like it. Patented. Two styles, hand and power. Mixes 2 1-2 cubic feet a minute. One man can operate it, but it will keep 2, 3, 4, 5 or 6 men busy. Continuous chain drive. Tilting dump. Easily and quickly moved. All parts guaranteed. Does work equal to $400 mixers. Be sure to get the catalog. Write today.

My New Special Offer
I want to tell you about my co-operative plan by which you can get my time-tried, thoroughly proven Sheldon Batch Concrete Mixer at little or no cost to you. I want ten men in every county to accept my special co-operative offer right now. Are you going to be one of the ten? Write and say: "Send me special offer."

The Sheldon will pay for itself on first small job. Takes the backache out of concrete. Makes possible those many small improvements that add so much to the value of your land.

SHELDON MANUFACTURING COMPANY Box 716 Nehawka, Neb.

The Mustard Jar

"Hang sorrow—care will kill a cat, and therefore let's be merry"

Best He Could Do

It was Mother's birthday, and her small son, Bobby, was very anxious to give her a present. Unfortunately, however, the recent holidays had somewhat depleted the change in Bobby's pocketbook.

"I say, Mother," he asked, "would my drawing slate be of any use to you?"

"No, dear; I don't think it would," she replied with a smile.

"Well, do you think you would like to have my tin steamboat?"

"No, thank you, my little man," answered Mother.

"I say, Mother," as a happy thought struck him, "I'll tell you what I'll do. I'll take a dose of castor oil for you without crying."

First Aid

As the motor was dashing madly through the little village, the driver suddenly pulled up with a frantic jerk. A man was standing right in front of his machine waving his arms violently and shouting, "Stop! Hi! Stop!"

"What's the trouble?" asked the motorist after he had brought the car to a standstill. "Is this a police trap? Because, if it is, I wasn't driving more than 20 miles an hour—"

"That's all right, sir," said the villager blandly. "I ain't no policeman. Only my wife has been invited to a wedding to-morrow, and I wanted to ask if you could spare her a few drops of gasolene to clean her gloves with."

Plenty in Stock

There is a proprietor of a shop in Missouri, a man of most excitable temperament, who is forever scolding his clerks for their indifference in the matter of possible sales. One day, hearing a clerk say to a customer, "No, we have not had any for a long time," the proprietor, unable to countenance such an admission, began to work himself into the usual rage. Fixing a glassy eye on his clerk, he said to the customer:

"We have plenty in reserve, ma'am; plenty down-stairs." Whereupon the customer looked dazed, and then, to the amazement of the proprietor, burst into hysterical laughter and quit the shop.

"What did she say to you?" demanded the proprietor.

"She remarked that we have had no rain lately," replied the clerk.

It Seems It's Human Nature

"I see here in the 'Leader'," remarked the shoe-drummer, "that your Mr. Wadleigh has gone to his reward."

"Yep!" the landlord of the Hopvine House answered. "And d'you know what they found out about him? Everybody in this town always called him a miser. Committees used to call on him for a subscription, and all the way home they'd take turns cussing him up one side and down the other because he never would contribute. Always claimed he didn't have it to give. And all the time we were sure that he was worth a hundred thousand, anyway. Then, after he died, it come out that he just had barely enough to live on, and that was all."

"I s'pose you all feel pretty tough over it?" the drummer ventured.

"I should say we do," the landlord explained. "Tough's no name for it. The idea of that old fellow living right here in our midst and deceiving us all these years!"

Fast Work

Two insurance agents, one a Yankee and the other an Englishman, were bragging about their rival methods. The Britisher was holding forth on prompt payments.

"Why, if a man died to-night," he continued, "his widow would receive her money in the first mail to-morrow morning!"

"Well, well," drawled the Yankee, "and do you call that prompt payment? Listen here! Our office is on the third floor of a building forty-five stories high. One of our clients lived in that forty-fifth story, and he fell out of the window. We handed him his check as he passed."

Usual Thing

PULLET (casually glancing at her mother's nest): "Haven't you forgotten something?"

HER MOTHER: "No, my child. This is eggless day."

Correcting a Sentence

"Can anyone tell me what is wrong with this sentence?" asked the primary teacher as she wrote on the board: "The toast was drank in silence."

The pupils studied for a few minutes, then the pride of the class went to the board and very proudly wrote the following correction: "The toast was ate in silence."

Poison Ivy

He Knew

A soldier, walking arm in arm with his sweetheart, happened to meet a sergeant of his company. He respectfully introduced her to him:

"Sergeant, my sister."

"Yes, yes," was the reply. "She was mine once."

Runs in the Family

A young gentleman took his little sister with him while calling the other evening at a house where he is a regular visitor. The little guest made herself quite at home, and showed great fondness for one of the young ladies, hugging her heartily.

"How very affectionate she is!" said the lady of the house.

"Yes, so like her brother," responded the young lady, unthinkingly.

The Friendly Spirit

A rookie passed an officer at one of the army cantonments and saluted in such a listless manner that his superior turned about sharply and in no mild tone inquired:

"Look here! How long have you been in camp, anyhow?"

The young man was not very well versed in things military and, mistaking the question for a friendly advance, replied:

"Oh, about two weeks. How about you?"

Not Surprising

During revival services in a small town the minister approached an elderly man noted for his dry sayings.

"Brother, don't you think you owe the Lord something?"

"Possibly," was the unhesitating response. "I owe everybody else."

Fair Enough

A reporter on a big daily newspaper had spoiled a good pair of trousers reporting a fire, and upon his return to the office gave them to the colored porter to clean.

After a time the porter brought them back with the word that he had tried everything he knew, but couldn't get the spots out.

"Did you try ammonia?" he was asked.

"No, sah," answered the slave; "but I know they'll fit."

Forethought

A poultryman and his son were looking at the chickens when they saw a hen eating a tack.

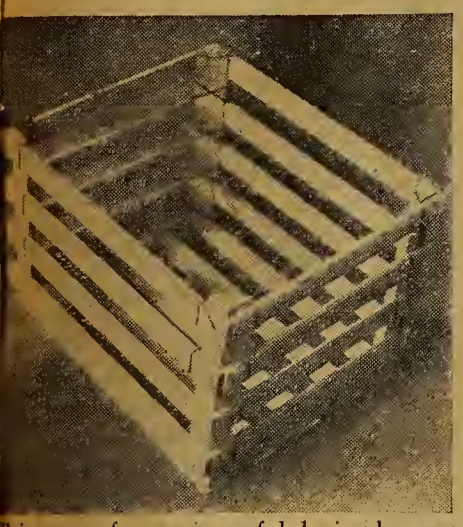
"What on earth is that old hen eating tacks for?" asked the father in amazement.

"That's easy," answered the son. "She's going to lay a carpet."

A Three-Crop Garden

By Mrs. Ida Kaiser

Y GARDEN plot being limited, I used a three-course relay of crops with ry gratifying success. My early pota- s ripened early in July, but two or ee weeks before they were fit to harvest nterplanted the plot with navy beans. ese, by intensive culture, ripened about tember 1st, but before they were ripe I nted between each row of navy beans a w of rutabaga turnips. The result was ee heavy well-matured crops from the me garden plot. The retail value of these ops was at the rate of several hundred llars an acre, and my other kitchen gar-



his type of crate is useful during harvest me and not less so as a ventilated storage ontainer

en was relieved of the duty of growing ese more staple crops which require ore space to develop.

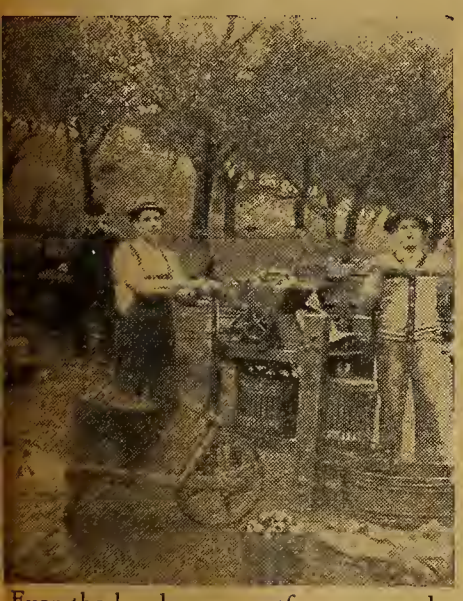
This plan of interplanting, when fol- wed systematically with good judgment, ill practically double the production of a nited back-yard garden.

The Future of Cider

By J. T. Raymond

F THE experience of the last apple har- vest is to be taken as a criterion, the wly, neglected cider apple is henceforth have a new lease of usefulness. Last fall any owners of cider-making plants— ge and small—renovated their outfits, ed all apples that could be obtained lo- lly, and even visited apple-growing centers nearby States, bidding for every bushel culls and windfalls to be obtained.

Large quantities of sound cull and wind- ll apples were sold last fall for 75 to 90 nts a hundredweight delivered at the ilroad station. This new source of or- ard income will mean much to owners of



Even the hand-power outfit turns much waste of fruit into cider, vinegar, and money

rge orchards should the demand remain ermanent, as there are now indications at it will.

The commercial importance of cider in e unfermented state bids fair to follow e lead of grape juice, loganberry juice, d fruit juices generally.

All indications now point to the fresh ice of the apple becoming a popular tional drink and, instead of the former early practice of barreling up quantities of der at apple-harvest time, it will be bottled d become a commercial unfermented oduct, and will also be produced by mall individual outfits from the time the arliest apples ripen to the end of the season.

Why the cost of producing cattle does not determine their selling price

TO produce a steer for meat purposes requires, as you know, a period of from one to three years.

The prices the producer has to pay for feed, labor and other items during this period, together with weather conditions, determine what it costs to produce the steer.

But the price the producer receives for the steer depends on conditions existing at the time it is sent to market.

If the supply of cattle coming on the market at this time is greater than the consumer demand for dressed meat, the prices of meat and live stock go down.

On the other hand, if the number of cattle coming to market is less than enough to supply the consumer demand for meat, the prices of meat and live stock go up.

Not only do the receipts of animals vary from week to week but the consumer demand for meat also fluctuates.

The rise and fall of prices results from an economic law that operates in every business. It is the packer's task to turn live stock into dressed meat and by-products, and distribute them to the consumer under control of this law.

Market conditions and competition establish the prices the producer gets for his cattle. When meat prices go up or down, so do cattle prices.

The packer can't pay out more money for animals than he takes in from the sale of meat and by-products.

Swift & Company will gladly co-operate in the carrying out of any national policy that will tend to steady the prices of live stock and meat.

Swift & Company, U. S. A.

A nation-wide organization owned by more than 22,000 stockholders

Use Your Ford!

to

GRIND YOUR FEED
FILL YOUR SILO
SAW YOUR WOOD
SHELL YOUR CORN
PUMP YOUR WATER
ELEVATE YOUR GRAIN

(10)

Ward Work-a-Ford

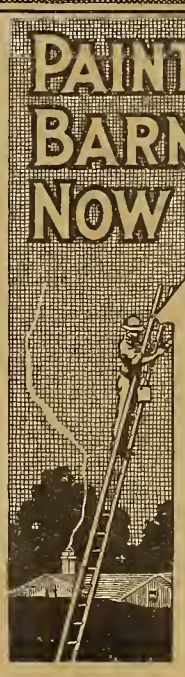
Gives you a 12 h. p. engine for less than the cost of a 2 h. p. Ford builds the best engine in the world—it will outlast the car—and you might as well save your money and use it to do all your farm work. **No wear on tires or transmission.** Hooks up in 3 minutes. No permanent attachment to car. Cannot injure car or engine.

Friction Clutch Pulley on end of shaft. Ward Governor, run by fan belt, gives perfect control. **Money back if not satisfied.** Ask for circular and special price.

THE WARD CO., 2035 N St., Lincoln, Neb.

PAINT YOUR BARN NOW!

There's no time like Fall for painting. Summer's sun has dried the surface thoroughly. The weather is more settled—bugs and insects are fewer.



YOUR barn has increased in value. Don't let it run down for lack of paint. Apply *good* paint—paint that will stick and protect for many seasons. Takes less labor to apply. Saves cost of repainting again next year. Is cheaper than repairs.

Lowe Brothers BARN PAINT

is a high grade linseed oil paint made especially for painting barns, silos, fences and out-buildings. Works easily, spreads far, covers well, wears long and leaves a good surface for repainting. Costs less in the end—*and takes less labor!*

Lowe Brothers Paints and Varnishes are sold in nearly every town. Write for literature and suggestions. Mention kind of work you want done.

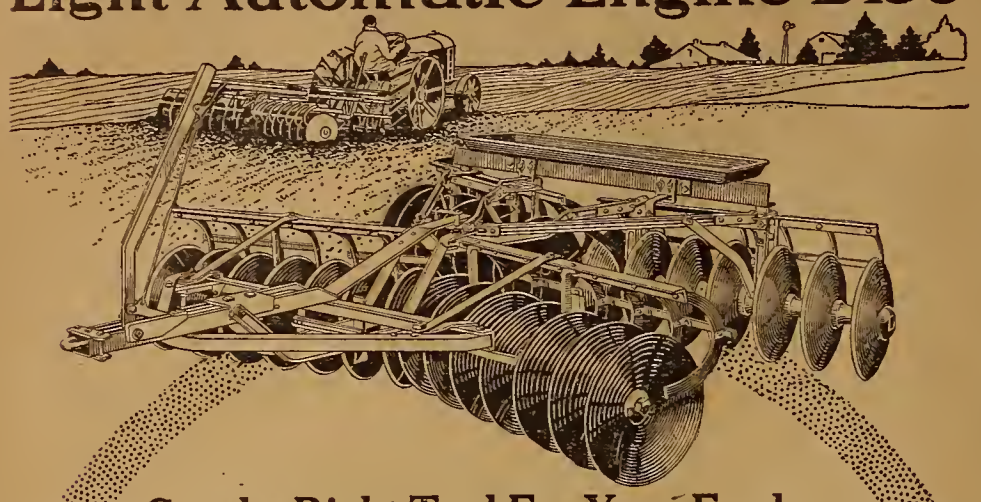
The Lowe Brothers Company

497 E. Third St., Dayton, Ohio

Boston New York Jersey City Chicago Kansas City Minneapolis

Roderick Lean

Light Automatic Engine Disc



Get the Right Tool For Your Fordson

The good work of any tractor is measured by the tools used behind it. Don't make the mistake of buying a good tractor and then try to get along with an ordinary harrow or one that is not automatic.

The disc equipment built specially for the "Fordson" Tractor and recommended by "Fordson" dealers everywhere is the

Roderick Lean

Light Automatic Engine Disc

Sturdy and substantial in every way. Made to meet power needs without unnecessary weight to make it heavy in draft. Adjusted and operated from the tractor seat like a power plow. The one lever alone allows the draft of the engine to adjust the gangs to suit soil conditions.

This harrow is flexible, with double connecting bars between the front and rear sections like our well known heavier tractor discs for larger tractors. Turns short like a wagon without unnecessary strain and without piling up soil.

Thoroughly works all ground passed over—rear section cannot slide on hillsides or track with front section. Made in 6 and 7 ft. sizes with 16 and 18 inch round or cutaway discs. Furnished complete with weight boxes, front and rear; disc cleaners, etc., etc.

See this disc at your "Fordson" Dealer's or write the nearest general distributor for prices and full information.

Roderick Lean Mfg. Co.

Dept. A-1 Mansfield, Ohio

WE WANT ALL KINDS OF FURS

FOX, BEAR, BEAVER, LYNX, MUSKRAT, MARTEN, MINK, ETC

WEIL PAYS THE MOST

REMITS QUICKEST. PAYS CASH. Holds shipments five days if desired. Furs are high. Big money trapping this year. Our large illustrated **Trapper's Guide sent FREE.** Frequent price-lists keep you posted. **Traps and bait.** In business 50 years. Biggest House. Ask any Bank. Cash quoted for hides. **WEIL BROS. & CO.,** "The Old Square Deal House," Box 114, **Fort Wayne, Indiana, U. S. A.** Capital $1,000,000 paid. **Boys, trap this year. Great chance. Everybody write.**

RO-SAN Indoor Closet

The original chemical closet. More comfortable, healthful, convenient. Takes the place of all outdoor toilets, where germs breed. Be ready for the long, cold winter. Have a warm, sanitary, comfortable, **odorless** toilet right in the house anywhere you want it. Don't go out in the cold. A boon to invalids.

GUARANTEED ODORLESS

The germs are killed by a chemical in water in the container. Empty once a month as easy as ashes. Closet guaranteed. **Thirty days' trial.** Ask for catalog and price.

ROWE SANITARY MFG. CO.
4010 6th St., Detroit, Mich.

Ask about Ro-San Washstand—Hot and Cold Running Water Without Plumbing.

THE SELF-OILING WINDMILL

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil, preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load.

We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.

Write AERMOTOR CO., 2500 Twelfth St., Chicago

Avoid 2 hrs Drudgery Every Day

Make Any Range A Gas Stove

Attach a patented OLIVER Oil-Gas Burner to your stove, fill the tank with common kerosene and it's ready for use any time. Cheaper than coal, wood or gas—clean, safe. Will cook and bake better than coal. Saves hundreds of steps daily. Keeps the kitchen cooler. Thousands recommend the Oliver. **SEND FOR LITERATURE AND PRICES**

Oliver Oil-Gas Burner & Machine Co., Inc., $250,000 fully paid: 117 N. Broadway, St. Louis, Mo.

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INSYDE TYRES Inner Armor

for Auto Tires. Double mileage, prevent blow-outs and punctures. Easily applied in any tire. Thousands sold. Details free. Agents wanted.

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Standard for over 75 years

STIFEL REGISTERED

Look for the boot trade-mark on the back of the cloth, inside the garments before you buy.

For Men's Overalls, Jumpers, Uniforms

Miss Stifel Indigo Cloth—for women's overalls and work clothes

The strongest, fast color, work-garment cloth made.

Garments made of Stifel Indigo sold by dealers everywhere

J. L. STIFEL & SONS

WHEELING, W. VA. 260 CHURCH ST., N. Y.

We are Manufacturers of the cloth only

Your Winter's Wood

By Russell Adams

NOW that the frost is on the pumpkin and the fodder's in the shock, it is a mighty good thing to plan for the winter's supply of fuel, which in our case happens to be wood.

There's a lot of solid comfort in sitting around a good wood fire when the wind is howling from the north and the mercury starts for the bottom of the tube. I think that a portion of this comfort comes from the fact that the builder of a wood fire is practically independent of riots, strikes, freight congestion, car shortage, and other kindred evils. And another consoling thought is the fact that when we burn wood we are helping to beat the Hun. Every hod of coal we conserve puts a crimp in the Kaiser, and that's what we must do.

The man who has timber and persists in burning coal in his stoves is an enemy, and should be classed as such.

Lots of people do not like to chop wood—to be truthful I am not very fond of the sport myself. But why chop wood if you own a gasoline or kerosene engine? Why not hitch it to a buzz saw and let it do the work in one twentieth the time you could do it.

Three men and a buzz saw will cut a winter's supply of wood in less than 5 hours and not complain of having been overworked either.

The piling of the wood to be sawed has considerable to do with the speed with which the work will be done when the saw starts. The poles or small logs should be ricked in even piles, with all butts turned the same way, next the saw, and not twisted so that it is next to impossible to get the stick you want.

We sometimes hear considerable about the dangers connected with a buzz saw, and I will admit that an active buzzer can hardly be classed as a desirable pet, but they are not half so dangerous as some persons would lead us to believe. If you are afraid of a saw keep away from it, for they seem to have a grudge against those who fear them.

Most accidents with saws can be directly traced to carelessness. A saw that is loose on its mandrel is deadly, for it is almost certain to break. A saw that is running high above its proper speed is apt to go to pieces and take some man with it, and a saw running too slow will break just as readily as one running too fast. Twelve hundred revolutions to the minute is about the right speed for an ordinary 30-inch saw, but there are so-called high-speed saws which will safely run must faster.

To do good work a saw should be filed every day, and the teeth kept the same length. A dull saw or a saw with uneven teeth will never make a record for fast work.

When sawing wood it is an excellent idea to keep your mind on the job in hand, for if you try to figure up the amount of income tax you owe the government you are likely to lose an arm, or be gathered to your fathers before your time.

Having had a little experience with buzz saws which may prove of some benefit to you, I will pass it along:

A 30-inch saw is the proper size for engines of six or eight horsepower, while a 24-inch saw is plenty large for four or fi horsepower engines.

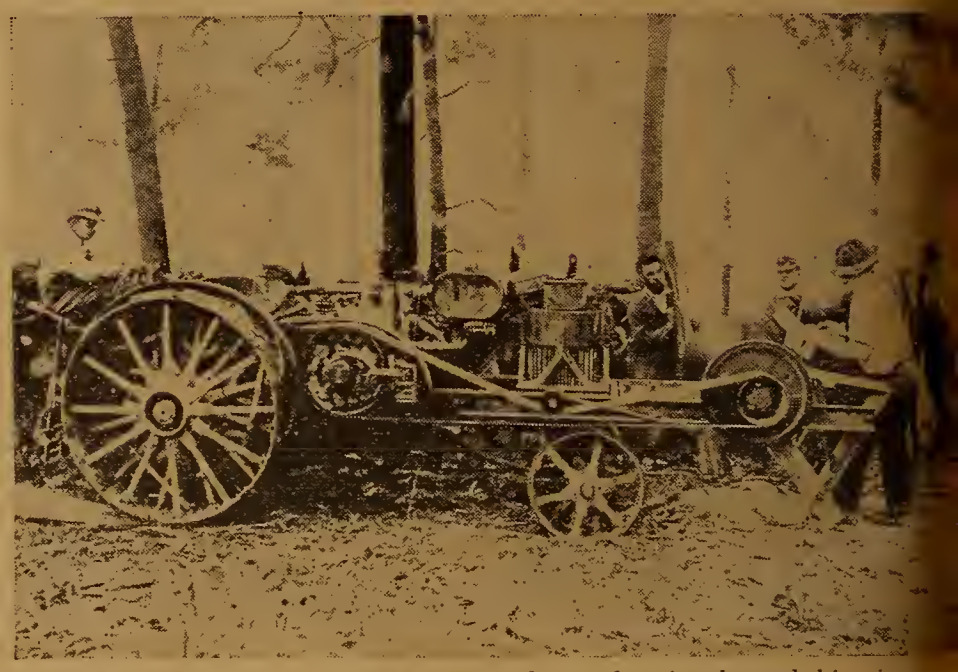
The smaller the saw the less danger breaking.

Saws break because loose on mandrel, i properly filed, twisting log while cutti by coming in contact with wrenches, e

Keep your mind on the job; remem you are sawing wood and not visiting.

Keep your saw sharp.

Keep all tools away from saw table.



A wood-sawing outfit will do a great deal toward saving the coal this winter

Tractors on Grain Farm

By Earle W. Gage

IN THE leading grain-growing sect crop returns have been greatly incre through taking advantage of favorabl and climatic conditions for getting the in shape for seeding, especially in re where this season is short. Had not tractor been introduced, millions of at present growing profitable grain could not have been handled with hor the sole motive power. Through co tration of power, as supplied by the tr it has been possible to plow very di soils and to plow deeply in ordinary so

The cost in production of wheat has lowered approximately 10 cents a b through tractor operation. Under favo conditions the cost of tractor plowin been brought below that of horse plo

The six-year experiment in determ the cost of horses as against tract plowing the grain fields of Min under the supervision of the Depar of Agriculture, is interesting reading practical farmer. The acreages con were: 166.9, 297.06, and 378.26

The average cost of keeping a horse in the grain-growing sectio ascertained to be $65.23 on the larg and $75.07 on the small farms, av 378 acres each. The cost per hour o labor for all sections is as follows: eastern Minnesota, 9.25 cents; sou ern, 8.36; northwestern, 7.32; and large farm, 7.46 cents. The average cost given is divided by the followin age number of hours' work perform nually by each horse, and includes t lowing items: Interest on inve depreciation, harness depreciation ing, feed, labor, and miscellaneous ex On smaller farms each horse worked average, only 3.14 hours per w throughout the six-year period, a larger farms somewhat less.

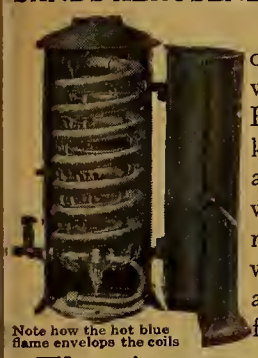
Thus, in order to have motive available at seeding time and at harve farmer is obliged to feed and house through seasons of practical idlenes annual average cost of maintaining workhorse is approximately $80, a this cost of maintenance the animal return in work of about three hours throughout the year.

Fully 40 acres a day are turned grain belt with a tractor outfit, the running expense being about $25. teams it would cost between $60 a to perform the same amount of w several times as many days. Not o the larger acreage handled quicker much cheaper per acre.

HEATS 30 GALLONS WATER IN ONE HOUR

—and keeps on doing it for as long as you want hot water! One gallon of kerosene will give you hot water for eight hours. You enjoy a city convenience in your country home with a

SANDS KEROSENE WATER HEATER



Note how the hot blue flame envelops the coils

Nothing to get out of order. No wick—Sands Special Burner vaporizes the kerosene which gives a hot blue flame—water is heated almost instantly. Hot water always ready at the faucet. Write for details.

The Augmore Mfg. Co.

5412 Sweeney Ave. Cleveland, Ohio

Also Manufacturers of the Famous Sands Gas Water Heater.

Plumbers—Write for Proposition.

Why Hens Won't Lay

P. J. Kelly, the Minnesota Poultry Expert, 106 Kelly Bldg., Minneapolis, Minn., has published a book, "The Tale of a Lazy Hen." It tells why the hens won't lay and how to make them lay every day. Mr. Kelly will mail the book free to anyone who will write him.

Shipped on Approval

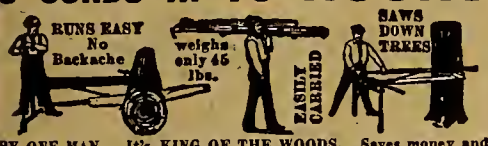
This Five Passenger 35 H. P. car. 116 in. Whl. base. Goodrich 32 x 3 1-2.—Delco Ign.—Dyneto Stg. and Ltg. Write at once for particulars of shipment and my 48-page catalog. Agents wanted to drive and demonstrate. Territory open. Prompt shipments. Big money. Cars guaranteed or money back. 1919 cars ready.

BUSH Address J. H. BUSH, President. Dept. M24 MOTOR CO., Bush Temple, Chicago, Illinois

Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

Electric Wheel Co.
12 Elm St., Quincy, Ill.

9 CORDS IN 10 HOURS



BY ONE MAN. It's KING OF THE WOODS. Saves money and backache. Send for FREE catalog No. B12 showing low price and latest improvements. First order gets agency.

Folding Sawing Machine Co., 161 West Harrison St., Chicago, Ill.

Money-Making Farm, $1950
Borders Sparkling Lake

70 acres, 1000 feet frontage on one of prettiest lakes in state; boating, bathing, fishing; profits from loamy fields; brook-watered pasture, 20 acres wood, timber; much fruit. 8-room house, 50-ft. barn, carriage house, poultry house, on good road, near station; owner's sacrifice $1950. Easy terms. Details page 5 Strout's Catalogue of this special mid-summer bargain and others, many with stock, tools, crops; copy free. E. A. STROUT FARM AGENCY, Dept. 2699, 150 Nassau Street, New York, N. Y.

GIVEN

Stem wind and set watch, **guaranteed 5 years**, for selling 25 art and religious pictures or 25 pkgs. post cards at 10c each. Order your choice.

GATES MFG. CO., Dept. 420, Chicago

IRONCLAD KHAKI

(Twill Cloth)

Uncle Sam's Boys and Girls both wear garments of

Ironclad Khaki

the patriotic economy cloth. It's fast color—can't fade and wears like leather.

Be sure the Ironclad "army" label is sewed in every khaki work shirt, pants and overalls you buy.

Garments on sale by dealers —everywhere.

Write for free samples of Ironclad Khaki Cloth and Miss Ironclad Khaki Cloth to

FRANKLIN MANUFACTURING CO.

MFRS. OF CLOTH ONLY

100 Market Place Baltimore, Md.

To Drain Your Land

By A. H. Harris

MONEY spent now in properly draining wet farm lands will serve the best interest of our country, and will pay a high rate of interest, often as high as 100 per cent. There is scarcely a farm in America where some drainage is not needed to make the soil produce the maximum crops possible with ordinary tillage.

There are millions of acres where good drainage would double the annual food production. There are other millions of acres

A bundle elevator lightens the work

which lie wholly useless for the want of proper drainage. In many sections the early September frosts last year ruined the corn crop on poorly drained fields, but only slightly damaged that on properly drained fields.

There are thousands of miles of ditches that need to be made now by dredging machines. Laterals should spread out from these further to carry off the excess water.

In many sections ditches are blasted out by the use of dynamite alone. Ditches from 3 to 12 feet wide are quickly loaded and fired under favorable conditions.

Automobile Plowing

MANY contrivances have lately been designed to attach to automobiles for plowing and other tractive purposes. At first they were intended mainly for small cars of medium horsepower. Recently attachments have been put on the market which will fit almost any car.

The principle is the same in practically every case. The hind wheels of the car are removed, and small pinion wheels keyed on in their place. These pinions in turn fit into cogs on the rim of the large tractor drive wheels, the latter being on a separate

Plenty of power for the job

shaft. The whole attachment is a single unit, and is bolted to the car frame at several places.

The only other change necessary is in the cooling system of the automobile. For plowing, it naturally follows that the speed would be slow, and the work of the engine comparatively heavy. The ordinary cooling devices provided by the makers of the car would be inadequate, so the manufacturer of the attachment also supplies facilities for better and faster water circulation.

The attachments have apparently given satisfaction up to this time, the only question being as to how long the average automobile engine and gears, which were designed for much lighter work, will stand the strain.

CARBIDE GAS lights this farmer's home (and barns) and cooks his meals—safely, quickly, economically.

It is rendering this double service in over 250,000 country homes today. The farmer was the first to discover the value and use of Union Carbide, eighteen years ago.

Following its widespread use by the farmer, the miner discovered that Carbide miners' lamps were a great improvement over oil lamps. Today over 700,000 miners use Carbide.

Metal workers and machinists in shipyards, on railroads, and in machine shops discovered they could weld and cut metals quicker and more economically with Carbide gas (when combined with oxygen) than by any other method.

Contractors, stevedores, and farmers found out its superior advantages for flare lamps and torches.

These are some of the uses that have made Union Carbide a big factor in all branches of industry.

Write us today for descriptive booklets by mail—FREE

UNION CARBIDE SALES COMPANY

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Peoples Gas Building, Chicago
Kohl Building, San Francisco

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800

Pay Nothing Down -Nothing Until 60 Days

Great Offer On the Famous Majestic Engine

We will send the Majestic without one cent in advance. Try it for 30 days free. If it does not prove the best engine of its rated horse power you ever saw, return it to us and we will pay freight both ways. If you decide to keep it, make first small payment 60 days after engine arrives and balance in 60-day equal payments thereafter. This gives you a whole year to pay. We take all the risk while you learn how the Majestic saves its price over and over and is the strongest, most economical, easiest to operate, most powerful engine for its rated horse power. Runs on gasoline or kerosene. Water-cooled by open jacket hopper-cooled system. Perfect lubrication. All the advantages of the Majestic easily proved by the free trial. No obligation on you for asking this. We ship any size engine at our risk. The decision is in your hands.

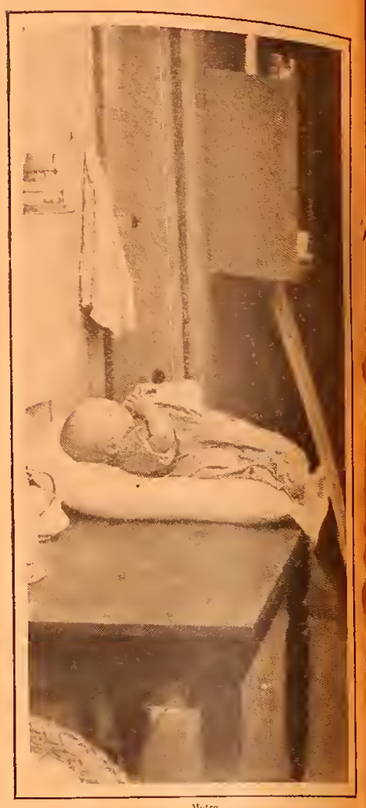
SEND FOR FREE BOOK

Written by expert engine makers. Full of engine facts. Tells how to get power at lowest cost—also explains our 30-day free trial, no-money-in-advance, full year to pay plan. Write for this book today. Absolutely free.

THE HARTMAN CO., 4039 La Salle Street Dept. 1381, Chicago

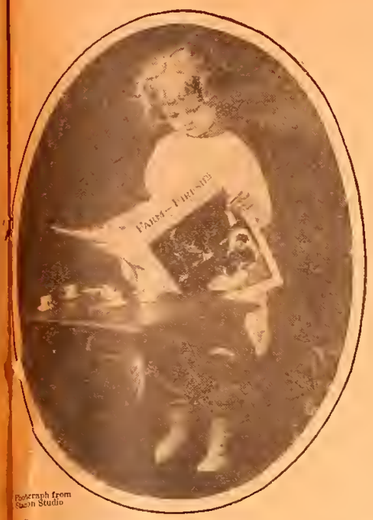
BRIGHTER BABIES

SIMPLE characteristics like being roly-poly or having dimples no longer bring babies into the spotlight. So-called Better Babies taking the required number of naps within a given period are giving place to the Brighter Babies with higher ideals and sterner accomplishments. Here, for example, is a child who sees no reason why she should take the trouble to creep and has taught her dog to carry her from place to place. "Here, Rover," says she, "I feel fatigued. Kindly carry me to the nursery."



Metro

HERE is a young person who will in time probably astonish the world with his inventions, since his first attempt shows such promise. Having observed the tendency of the feeding bottle to slip to the floor at awkward moments, he arranged to have a hook placed in the ceiling with a cord hanging therefrom. To this cord the bottle was attached securely (patent applied for). Not for our young adventurer the padded protection of the crib, but rather the wild free air of the kitchen table. Mother may attend the movies or go to the polls to vote—it's nothing in his life.



Photograph from Bacon Studio

TO OUR unprejudiced eye this child appears to be the very brightest of all the astoundingly bright babies on this page. Even though breakfast is ready, has she not deliberately chosen a copy of our magazine from all the others on the library table, and does she not read it from cover to cover every month? Long ago she became convinced that nursery rhymes do not prepare one for the life of the great world. From reading our helpful articles she is able to tell her parents just how to bring hersel up.

THIS young gentleman of color early perceived that a woolly lamb was a very tame plaything compared with a live and kicking bu ro. From the look of complete affection in the burro's left eye, it is clear that he admires and trusts his young master and would never think of going into reverse when a forward movement was expected of him. From the young gentleman's interest in dumb animals he will probably become one of the leading veterinaries of his home town in the Virgin Islands.

From the New York "Tribune"

OF WHAT use in a crisis is the lisping by baby lips of "Da-da, goo-goo?" When duty calls, what we want is a child who can straighten out the situation in an impartial way. Take this touching family group. When Papa found that his entire fortune had been swept away, and began looking around for a convenient gas jet to end it all, it was little Yolanda who cleared up the problem in a few well-chosen words: "Papa, you must get a job in a munitions factory, while Mother becomes a street-car conductor. I am young and strong and can manage the housework. Soon we shall again be living in luxury."

William Fox Standard Picture

Photograph from Paul Thompson

AT FIRST glance this delightful exhibit may seem to belong rather to the old-style class of infants. He is roly-poly, he has dimples, all characteristics of the Better Baby. But in his eye there is the light of deep thought. He is keeping his temper very well while he tries to convince Mother that he wouldn't mind having his picture taken without rompers if he didn't have to think of the future and Aunt Sara telling the fellows, "Yes, this is Harold at the age of six months."

Photograph from Jessie Tarbox Beals, Inc.

THERE'S so much to do and so little time to use in doing it that it behooves a baby to get an early start if it wants to accomplish anything. In these stirring times, with Father at the front, why should Baby Hester waste her time knocking over blocks, when with persever-ance she can learn to shoot a Browning gun? Persons two years of age or under wishing to join the Brighter Babies Brigade for the Protection of Home and Mother will please send their names to this office.

WE ALL learned in dancing school that it wasn't proper to cross the knees. But what is a mere matter of position to one who is doing her knitting? Although at the time of going to press Elizabeth hadn't progressed much beyond a couple of purls and a dropped stitch, we feel sure that in true Brighter Baby fashion she will persevere until she has completed a sweater for some brave soldier. Even if he has to use it for a pipe-cleaner, Elizabeth may feel that she has not wasted her youth in frivoling.

Photograph from Press Illustrating Service

AT THE ripe age of three months this young man is able to swing casually from a broom handle suspended ever so high in the air; and we are assured that he is not being held on by the thumbs. We believe in athletics for babies; but the question arises: Would an infant of this sort fit well into a peaceful home? With his well-developed biceps and powerful muscles, he would have to be treated with respect rather than condescension. It might be dangerous for Father, who hasn't exercised in fifteen years. Perhaps that tiresome old parental gag about "it hurts me more than it does you" might turn out only to be too true.

WHEN mothers of ordinary babies are writing to inquire whether it would be safe to give a two-year-old child a hobby horse for Christmas, our young heroine (have you noticed that most of these remarkable examples are young ladies?) is fearlessly dashing about on a fiery pony. Having come of age (three years), she is now able to support her deserving parents in luxury by doing trick riding for the movies. We ask you, children, why cry to see a circus when you can be one?

It takes you there It brings you back Comfortably

THAT'S the addition Hassler makes to the famous slogan so truly descriptive of "the universal car."

For FORD Cars — HASSLER PATENTED **Shock Absorber** — For FORD Cars

A Hasslerized Ford will take you there, anywhere, and bring you back comfortably. Hasslers will give your Ford the long easy swing, the *glide* you formerly thought attainable only in a car costing $2,000 or more. No matter how rough the road, the wonderfully resilient, chrome vanadium coils will stand between you and every irritating jolt and jar.

Hasslers will continue to keep your Ford comfortable during the lifetime of your car. They are so simply constructed there is nothing to get out of order. They act by compression and are strengthened by use—not weakened and *stretched* by every bump.

This comfort will cost you nothing. Hasslers will pay for themselves over and over again by cutting tire, gas and up-keep costs, and by increasing the resale value of your car.

10-DAY FREE TRIAL OFFER

Write today for FREE TRIAL BLANK and we will have a set of Hasslers put on your Ford without a cent of expense to you. Try them ten days. Then, if you are willing to do without them, they will be taken off without charge. Don't ride without Hasslers simply because someone discourages you from trying them. Accept this offer and see for yourself. Nearly a million of the patented Hasslers now in use. Write today—Now.

ROBERT H. HASSLER, Inc.
1804 Spruce Street — Indianapolis, Indiana

Moline-Universal Makes Wonderful Record at National Tractor Demonstration

JUST how conservatively the Moline-Universal Tractor is rated at 9-18 h.p. is shown by the astonishing official tests made at the National Tractor Demonstration which showed it to have an excess of over 11 h.p. on the draw bar and 8 h.p. at the belt.

These tests show beyond question of doubt the efficiency of the Moline-Universal. For each 169 lbs. of weight the Moline-Universal developed 1 h.p. on the draw bar. Compare this with the ordinary tractor which develops 1 h.p. for each 250 to 300 lbs. weight, and you will realize the greater efficiency and greater economy of the Moline-Universal.

We shall continue to rate the Moline-Universal at 9-18 h.p. A tractor to give satisfactory service and stand up for years under the strain of tractor work must have reserve power, and the greater the reserve the better. Under normal conditions the Moline-Universal has from 50 to 100 per cent reserve power.

Ninety-eight per cent of its entire weight is on the two big drive wheels where every ounce is available for traction—no dead weight.

At 3.5 m.p.h. under average conditions the Moline-Universal will plow as much in a day as a 3-plow tractor traveling at 2.25 m.p.h.

The Moline-Universal has ample capacity for all ordinary plowing needs, and is equally suited for light operations, including cultivating, which require far more work hours than heavy work. One day your work may be heavy, the next day light—and light work is just as important as heavy. The Moline-Universal fully meets both these requirements.

Send for free tractor catalog. Address Dept. 60.

Moline Plow Company, Moline, Illinois

The Mystery at Glen Cove

[CONTINUED FROM PAGE 3]

from dyspepsia. I smiled to cover my confusion. Manifestly, my imagination had made a monkey of me. I turned casually to my neighbor, responding to some observation of hers, but I kept a watchful eye upon Mr. Carter. I was not yet convinced that in him, at least, there was not food for interesting speculation.

These thoughts were interrupted by the calm voice of Admiral Debrett. "To hear you young folks chatter," he declared, "one might think that these were not serious times."

Agatha giggled.

"Serious? Why, it's the gayest summer the Cove has ever known!"

"Quite so, my dear," he agreed. "But mirth was free the night before Waterloo."

There was a strange note in his voice, which inexplicably stilled the hum of conversation. There was a rather uncomfortable little pause. It was young Quan who broke it.

"You don't really think anything serious is likely to happen, do you?"

The old gentleman fingered his empty cordial glass for a moment without replying.

"I think," he said slowly, as if weighing the import of his words, "that we are nearer trouble than we have ever been since Sumter was fired upon."

The measured gravity with which he spoke seemed to strike at every heart.

"Of course you will understand," he went on, "that what I say represents nothing more authoritative than my personal and purely private opinion. Nevertheless—" He paused heavily.

"Please tell us what you fear," cried Mrs. Brandt. It struck me that there was more animation in her tone than I had before observed.

"Well, my young friends, you know as well as I the grounds for hostility between us and the gentry across the water. You are familiar with the almost insupportable indignities to our flag. You know—"

"But they wouldn't dare attack us!" declared Quigley with almost comic optimism. "Why, if they—"

"Possibly not. But they might goad us into making the attack—much more desirable from their standpoint. On political grounds, their position apparently on the defense would be vastly strengthened."

"Then you believe—what?" It was not often that I saw Leslie Steele look so serious. I fancied that the admiral had formulated his own feelings, confirmed his own suspicions. It was quite remarkable how the same tense spirit had communicated itself to the others. The pleasant atmosphere of badinage had deserted the cheerful little gathering, giving place to an ominous foreboding.

"I believe"—the admiral spoke very slowly and thoughtfully—"I believe that unless assurance of support comes to us shortly from a quarter not hard to guess, we will be plunged into the bloodiest war of our history within a fortnight. It is my conviction that our fate hinges absolutely upon the decision of a nation which alone has the power to save us."

AS THE old gentleman pronounced his startling words my eyes chanced to fall upon Agatha's mysterious young friend. My heart throbbed with excitement at what I saw. There could be no question now of imagination. The young man who called himself Carter had turned distinctly pale, and his hand trembled, ever so slightly, as he laid his cigarette upon his plate. My suspicions crystallized into certainty. This shy, quiet youth was in some intangible way bound up with the mighty events transpiring overseas.

His lips opened, and for a moment he seemed about to speak. Almost immediately, however, he regained his silent composure, and as if to counteract any surprise he might have occasioned he turned to Mrs. Debrett with an urbane smile.

"Do you share the admiral's alarm?" he asked easily.

"Bless me—not at all," replied that good woman, candidly. "The only time I've ever known my husband to be quite free from alarm was in '61. He was going to be home in four weeks—and he didn't get home for four years. Ever since he's been a hopeless pessimist."

The party was obviously relieved by her placid repose. Before her husband could come to his own defense the gay hum of conversation was resumed. It dealt, for a time, with the now remote possibility of war, shifting quickly to such normal topics as golf and tennis and sailing, and, of course, the inevitable piquant sauce of gossip.

It was a warm evening, and we soon adjourned to the comfortable chairs of the veranda. Quigley possessed himself of a guitar, and cheerfully committed murderous assaults on various melodies of a supposed Hawaiian origin. The rest of us chatted pleasantly on the topics which severally interested us. Mr. Carter, apparently more at his ease in the darkness, was recounting, rather cleverly, a hunting anecdote, when the butler, Toguchi, glided softly out and whispered a word to the admiral.

"Pardon me, Mr. Carter," said the old gentleman. "I dislike to interrupt you, sir, but you're wanted on the telephone. Toguchi will show you where it is."

I was watching the young stranger closely, and I was positive that I saw him start at the admiral's words. He was sitting in a dim half-light, so I could not be sure, but I fancied that he and Agatha exchanged glances. He seemed to be puzzled. Nevertheless, with a quietly murmured word of apology, he rose immediately and followed the butler.

STUDYING Agatha as closely as the light would permit, I was convinced that she was extraordinarily agitated. She laughed and chattered as gaily as before, but with a nervous excitement quite new, and her eyes wandered constantly to the door through which her friend had passed.

It was my instinct and my impulse to follow Carter and, if possible, overhear his conversation, but instinct in a man of my age and habits is effectually held in check by the little conventions of civilized society. I simply could not, much as I wanted to, rush from the veranda. I must have some pretext. But as my slow wits sought for something plausible, affairs abruptly took a new turn. The lights throughout the house suddenly went dead.

"Something's wrong with the lights," said someone obviously.

"Ring the bell for some candles, Martha," was the admiral's practical suggestion to his wife.

Quigley's plaintive voice came from the chaise longue in the corner.

"What d'ye suppose—" He broke off shortly. "Now, what the devil was that?" His startled question voiced the unspoken thought of all of us. We had heard the same sound—a muffled, choking gasp, followed by what seemed a faint groan, and then a dull snap, like two books being knocked together.

My heart pounded, and for a moment I sat paralyzed. Afterward I recalled that in that long moment of inaction something else happened: a breath of cold air struck my cheek, and I heard another sound—the swish of silk.

Steele, the lightning-minded, was the first to act. I heard the scrape of his chair thrust back, and the crash as it fell to the floor. Almost simultaneously the lights went on again.

We faced each other with blanched faces, a mute question in every eye. Steele, stunned by the sudden blaze of light, stood staring like the rest of us.

The tension was snapped by the impassive Toguchi. The screen door opened and he stood before the admiral.

"You rang, sir?" His manner and his voice were so quietly familiar as immediately to banish the dread forebodings of the moment. Young Quan laughed hysterically.

"By George, I—I thought we w-w-were in for fire, murder, and sudden death!" he stammered.

"I—I—it seemed to me I heard a—a groan," said Quigley with a nervous laugh.

"I'd have sworn it," murmured Steele seriously, looking very puzzled. "Hello—where's Marie?"

No one answered. In obedience to his question all eyes turned to where she had been sitting. She was not there. The ominous shadow, momentarily dissipated by Toguchi's reassuringly matter-of-fact entrance, fell again on our hearts.

For a moment we sat inert, wondering what lay beyond the door through which Carter had passed a few moments before. Then, with a muttered imprecation, Steele strode into the dimly lighted reception-

[CONTINUED ON PAGE 28]

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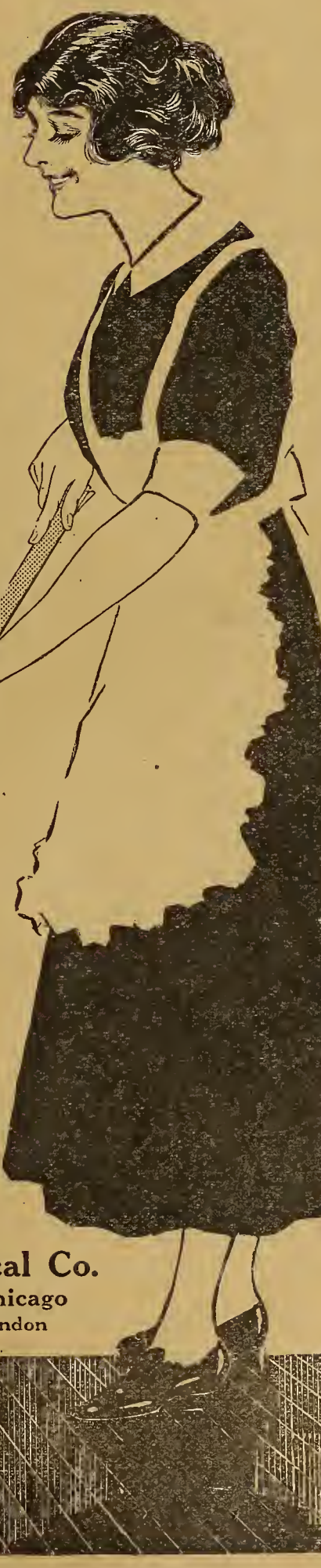
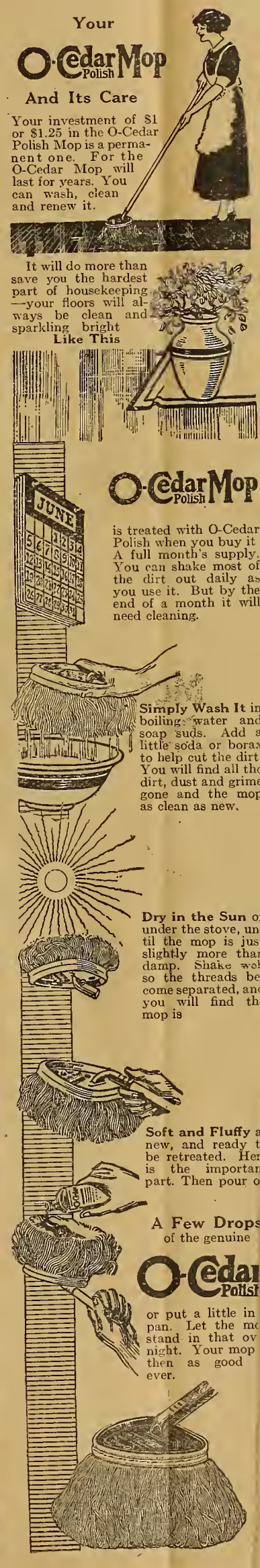
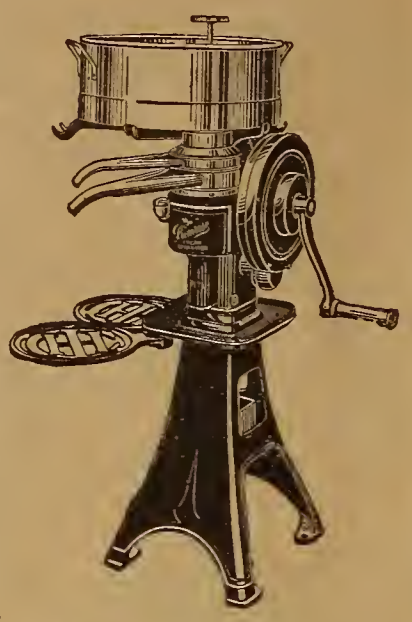




Stop the Cream Loss!

IF YOU are still setting your milk and skimming by hand, you are losing anywhere from one-fourth to one-third of your cream. If you are using a separator, and it is not one of the best, you are still losing an amount of cream that would surprise you if you knew it. Every farm loss or leak that can be stopped this year should be stopped. Buy a **Lily** or **Primrose** cream separator and stop the cream loss.



Don't imagine that cream left in the skim milk will fatten pigs and calves faster. It has been proved scores of times that stock thrives as fast on warm separator skim milk, when a little meal or flax replaces the fat. Cream in the skim milk is dead-loss cream!

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Learn Your Cow's Value

By J. T. Raymond

WHAT the owner thinks of a cow covers to a great extent the feed and care she receives. The cow-test advocates generally take as a text the worthless cow that obtains feed and care when she can never pay for them and ought to be slaughtered. The owner thinks she pays, and keeps her on. That is one kind of dairyman who loses money. Another kind underestimates the worth of his cows and does not give them the feed and attention they deserve and for which they are capable of making handsome returns. Pure-bred cows commonly receive much better care than grades, because owners of both pure-breds and grades are agreed that the pure-bred deserves more attention. In actual farming many pure-breds merit less consideration, and many grades more than they get. A grade cow can be mighty good, and it is entirely possible for a pure-bred to be downright poor.

A concrete illustration, vouched for by T. A. F. Winacko, a government dairy expert, occurred recently in a Pacific Coast test under government supervision. The cow, a grade Holstein named Dairymaid, has been enrolled two years in the Delta Cow Testing Association. During the first year, demonstrating that she was an exceptional cow, she produced 13,992 pounds of milk in the hands of an indifferent owner. She was more often underfed than otherwise. Kept overlong on pasture, she remained out in the rains and snow of fall and early winter. In summer she was sometimes seen foraging along the roadside, barked at and chased by dogs.

This neglected cow, however, proved the local sensation of the year. She tied for first honors in the test association with Lady Bountiful, a pure-bred which, in the hands of A. D. Paterson, a well-known breeder, had the benefit of scientific feeding and conscientious care.

Early in 1917 a progressive farmer, Alex Davie, bought Dairymaid, and her production in his barn, for the year ending February 5, 1918, was 22,514 pounds of milk, an approximate increase of 70 per cent on the year before. And she didn't receive hothouse treatment, either—just good, honest care. During the six months, May to October, she had nothing but first-class pasture. The fact that she was intelligently rationed during the balance of the year, in comfortable quarters, partly explains the spectacular increase in production and the making of a splendid record.

What does it cost to study a cow intelligently, and to base feeding and general care on considered judgment? Some dairy farmers will say at once that the satisfaction of doing a thing well is return enough, wholly apart from the financial benefit which surely follows. The cow tester's accurate compilation of feed costs for the two years Dairymaid was under test are interesting. During 1916 her feed bill was $50.95 -$20 for grain and mill feeds and the balance for hay, roots, pasture, etc. Her best day's milk yield was 45.5 pounds; her greatest month's butterfat production, 57 pounds.

On Alex Davie's farm in 1917 the same cow's record day's milk was 76.5 pounds, her best month for butterfat, 99.6 pounds. Her feed during this year, when she produced nearly 9,000 pounds more than in 1916, cost just $16.65 more—$67.60 in all. The various items were hay, $15.75; roots, $7.20; chop, $16.15; pasture, $13; bran, $5.30; silage, $9; shorts, $1.20.

Dairymaid, in other words, gave something like 9,000 pounds of milk in return for $16.60 more in feed, plus good, intelligent care.

Here is a lesson worth pondering. A safe program is in the beginning to keep only such cows as one can respect and care for, then keep some reliable tab on production, either through a testing association or by individual work.

Producing Clean Milk

By H. H. Haynes

TOO many dairy farmers have the idea that unless their barns and equipment are expensive it is impossible for them to produce clean, wholesome milk. With this idea in mind, any effort spent in trying to better their condition without actually rebuilding is regarded as a waste of time. Good buildings and equipment should be the aim of every dairyman, but care and cleanliness observed in the ordinary barn will bring surprising results. Any farmer can produce clean milk.

Pure milk, or that which contains comparatively few bacteria, depends largely on four things. These are: Steam sterilization of utensils; clean cows, especially clean udders; small top milking pails; proper manure removal and plenty of good bedding.

Absolute cleanliness with regard to containers and utensils is the first step. Live steam will give the best results, and $10 will buy a sterilizer that will answer all ordinary needs.

Many owners are careless as to the condition of the cow at milking time. Dirt is often left clinging to the flanks and udder, a large portion of which will find its way into the pail. The next time you pour milk into the bowl of the separator leave a little in the bottom of the pail and notice the dirt and filth it contains. Seeing this day after day should convince one that it would pay to use a brush and a damp cloth on the flanks and udder of the cow.

The milk pail with a small opening is worth many times its actual cost. In spite of your utmost care, a certain amount of dirt will find its way into the pail, but with an opening only a third the size of the ordinary one the entrance of dirt is reduced accordingly.

The most important part of the work, and the one that is most often neglected, is the proper removal of the manure. It seems like a small thing, but many farmers clean their cow stalls only once or twice a week. When a cow is compelled to lie in a stall that is in this condition, is it any wonder that dirt and filth find their way into the pail?

By observing the four points mentioned, and by cooling the milk properly as soon as possible after milking, every dairyman can produce clean milk without the added and expensive equipment he believes to be so necessary.

Milking and feeding the cows at regular intervals has much to do with the amount of milk they give

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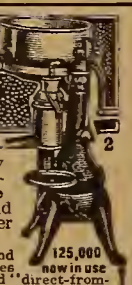

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Five Years a Tenant Farmer

By E. P. Roberts

DURING five years of farm-renting in partnership with my brother, we have formed some very definite conclusions about tenant farming and the inability of the average farm renter to do his rightful part in meeting the needs of the war in the production of maximum food and clothing crops.

The tenant farmer, as a rule, is as patriotic and as desirous of during his full share as the best of them, but he is hedged about and chafes under restrictions which our own experience will serve to explain.

When we rented an Ohio farm of 435 acres March 1, 1913, it was naturally one of the best in the State; but the sapping system of tenantry had already left its mark. Soil, buildings, fences, ditches, and machinery—all spoke of lack of upkeep. The owner, a city business man, knew nothing of the needs of his farm, which to him was an investment to be looked after by his attorney.

Naturally, his attorney-agent's aim was to make sure that his employer's farm investment should pay the best possible dividend while under his care. The future good of the farm must take care of itself. The annual net cash income was his thought first and last. Expenditure for fertilizer, fencing so that more stock could be kept, draining, building repairs, better seed—all would lessen the income for that particular year.

Therefore, any requests for such expenditure had been vetoed in the past, and our best arguments met with the same response—"The probable returns for this year do not justify the outlay." The agent would not take the chance of making known to the owner that there was a steady depreciation of his farm in crop productive power.

Finally, at the end of our second year's operation of the farm, the agent could no longer conceal the truth from the landlord, and an agent having practical farm knowledge was appointed.

The system was then changed from a basis of grain shares to stock rent, and a general overhauling and improving was begun. New fences were put up, old drains were repaired and new ones put in, buildings were made weather-proof, machinery was put in order and renewed, lime and fertilizer were procured in car lots, and we were given right of way in our renewed contract to put the farm on the up grade.

Of course, the first year of the new basis of operations swept away the landlord's farm dividends for the two preceding years, and more. But now that the sixth year of our operation of this farm draws to a close there is a different story to tell. Now we annually feed from 20 to 30 high-grade steers and have the matured pigs from a score of brood sows to market.

Already, by the help of the stock kept and progressive soil improvement measures systmatically followed, our crops of both grain and fodder are more than doubled, and the new income going to our landlord is realizing him a much better return on a 30-per-cent higher valuation.

For our own part, we now have the satisfaction of operating under the farm owner direct, which change we brought about by proving to him that what was desirable for his financial interests was also best for us; and we proved our point by what we were doing on the farm.

Last spring, after the entire farm was ready for plotting for systematic rotation for cropping and pasturage, I spent two days with the owner in plotting and mapping the fields in accordance with definite measurements, so that the seeding, cultivating, and harvesting can be exactly reckoned and our farming may become an actual business proposition.

I can speak for myself, and my brother as well, when I say that there is a genuine satisfaction in having been able to put this big farm into such condition that it is an important, if limited, force for helping to win the war. There are thousands of American landlords who only need to see this matter of economic farm production as it is, and they will be just as willing to right the existing wrongs under which their tenants are laboring with but little results.

News of the November Number

HERE is a list of a few of the most interesting articles in the next issue:

"The Army—a School for Specialists," by Edwin Balmer.
"Where Town and Country Meet," by R. P. Crawford.
"What Your Boy is Doing 'Over There'," by George Martin.
"Frontier Fruit-Growing," by Frank A. Waugh.
"A Volunteer on the Way to Verdun," by R. B. Woolley.
"Marketing—the Farmer's Biggest Problem," by T. J. Delohery.
"The Joe's Bay Trading Company," by Bertha Snow Adams.
"What About Measles," by Dr. Charles H. Lerrigo.
"Women War Workers," by the wife of Private Peet.

Buying Feeding Cattle

By Ray Jones

IN DECIDING the kind of feeding cattle to buy, the feeder has many things to consider. There is the food question—the largest of all.

Corn has been hit by frost in some places, and what of it has not been turned into silage will be fed live stock, chiefly cattle.

The question of how long one intends to feed the cattle is of great import, for on this decision rests the kind of cattle to buy. If a feeder is prepared for a long feed, then he should buy cattle of good quality; if for a short feed, cattle of poorer quality. As John G. Imboden, a successful feeder, says: "You can get any steer fat if you will feed him enough."

In buying feeders one must pay particular attention to the price. If one is buying two-year-olds or up, get the price down as far as possible, because, with aged cattle, the opportunities for profit lie mainly in the margin. On the other hand, with calves or yearlings, it is the cheapness of the gain that permits a profit. Always bear in mind that the older the animal the greater is the cost of gain.

It is advisable, where soft corn is fed in the shock, to feed cottonseed meal in addition. This makes a good ration, as does meal and silage.

Many feeders are of the opinion that the trade will not hold up, and as a result are laying in a lot of high-priced cattle, carrying good flesh, for a short feed. The prices they are paying are dangerously high, but a high market is looked for by the traders.

Weaning Pigs

WEANING is one of the most dangerous periods of a pig's life. Young pigs are often seriously injured if allowed to eat too much feed at one time. They should have access to corn and other grains while they are with their mother, so that when they are weaned they will know how to eat.

Skim milk or buttermilk is desirable feed for pigs at weaning time. The milk should be fed in the same condition at all times, either sweet or sour, otherwise digestive disorders are likely to be caused. The feeding trough should be kept clean.

Care should be taken that the pigs are not overfed. Overfeeding will stunt their growth. One of the greatest secrets of success in the rearing of weanling pigs is the frequent feeding of small quantities of food. The stomachs of the pigs are not capable of storing a large amount of food at any one time.

Usually the pigs are large and thrifty enough to wean at the age of six to eight weeks. They should have access to forage such as alfalfa or clover, if at all possible.

The Call for More Pork for Our Fighting Men

"A hog is of greater value to the winning of this war than a shell. Every pound of fat is as sure of service as a bullet."—*Herbert S. Hoover, U. S. Food Administrator.*

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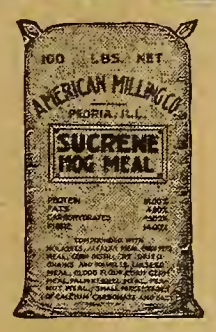

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Skunk-Farming

By Bert H. Iverson

WHILE I have been skunk-farming on a small scale for the last four years, the results have been very profitable. Skunk hides are now selling from $3 to $8 apiece, depending on size and quality, while the live breeding stock will bring from $5 to $12 an animal.

I feel that I have had very good luck, especially during 1914 and 1916. In 1914 I started with three females and one male. These three females produced 21 young of the short-striped variety. I kept the best females out of these litters for my future breeding stock.

The following year I didn't save a kitten, but the year after, in 1916, seven females produced 40 kittens. Five of these died, but the rest brought me $120.

A skunk is a very hardy animal and can be shipped any distance if supplied with water and dry bread. If fat, as they usually are in winter, no food is required.

Their food consists of any kind of ripe fruit or vegetables, soft corn, cornmeal mush, meat and table scraps. I also feed skim milk every other day. They only receive food ten months out of the year, and only once a day during that time.

They come out of their dens or houses about sundown, and roam around the greater part of the night. They are rarely seen in the daytime unless very tame and petted a great deal. I might add here that I remove the scent sacs from the little ones when they are about six weeks old, doing away with all possible odors.

I would advise anyone who attempts skunk-farming to keep his stock enclosed

Even though they become tame, skunks require strong, durable cages

within a good fence. Use one-inch mesh wire and not lighter than 18 gauge. In soft ground this should be buried at least two feet, and extend four feet above the ground, with a one-foot overhang to prevent the animals from climbing over. Hilly ground is the best, and if it is possible to have a small stream flow through the pen, so much the better.

Tricks of the Trapper

By R. K. Wood

MAKING sure of a good winter's catch of fur requires much more than a good trapper's outfit and a chance at a locality where fur bearers abound. For the trapper must match his wits against the inherited instinct of self-preservation which has been developed through uncounted generations.

The beginner in trapping can quite safely rely on getting skunks and muskrats wherever they abound; but the raccoon, the mink, and the beaver are duly able to match wits with trappers of considerable experience. While the wary fox may be plentiful all about where the trapper makes his daily rounds, unless the habits of this prince of fur bearers are known no sight or inkling of his presence will be guessed.

It is not at all uncommon for a fox to follow the trail of a trapper throughout his rounds of sets and skillfully spring the traps to obtain the baits, without getting caught.

In the case of the raccoon it is his curiosity that hastens his finish. The trapper knows how a shining mark in the water attracts this now valuable fur bearer, and over the jaws of the trap in shallow running water he adjusts tinfoil or a glistening button. The inquisitiveness of the raccoon does the rest.

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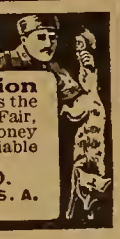

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Motorcycle Chains

By Wm. E. Curley

MOTORCYCLE chains gradually wear and lengthen with use. As this stretching occurs it becomes necessary to adjust them to keep them at a proper tension. Now a chain rarely stretches the same amount throughout its length. Almost always one part of it wears more than another. So, in tightening it, turn the chain all the way around the sprockets until it is in the first position before considering the job complete. Otherwise, in one position the tension may be proper while in another it may be stretched almost to the breaking point, thereby putting a lot of unnecessary wear and strain upon the sprockets and bearings. It is almost superfluous to remark that an extremely tight chain soon loosens, the victim of more wear then months of normal use would cause.

A trailer increases your hauling capacity with same motive power

On the other hand, having a chain too loose may work even more harm. I once got careless and did not take time to adjust the long chain of my machine. As a result, after flapping up and down for a few days, it jumped off the rear-wheel sprocket and jammed between the sprocket and hub, tearing out a dozen spokes. It tore the spokes loose from the hub and my negligence cost me a new drive wheel.

When it becomes necessary to replace the short engine chain, always get a new engine sprocket. By the time the chain is worn out, the small sprocket is pretty well used up and a worn sprocket will use up a new chain very quickly. At the end of the third engine chain it is well to replace not only the engine sprocket but also the large clutch sprocket. The long chain of course will outwear several engine chains, but when replaced should have new sprockets.

Battery Logic

By John Russell

A FEW days ago I had an interesting conversation with the battery expert who looks after the make of battery with which my car is supplied. He remarked:

"We battery men get so that we can tell in general a man's character from his battery. The man who is naturally careful is the one whom we see every month. He runs up to the door and has us test his battery, and nine times out of ten goes away with a clean bill of health. His battery is always filled, and, since the level never fluctuates, we know that it is filled regularly.

"Sometimes, before the regular time for his visit, he will come down and explain that something is wrong, and when we ask him why, we learn that he has been using his hydrometer syringe as regularly as he has filled the battery with water.

"At the end of the year, if he is going to store his car, he brings it in and stores it with us, giving orders to renew the insulation in the spring.

"If he is running his car through the winter he generally has his battery overhauled at the same time he has the rest of the machine overhauled for the opening of the next season.

"Occasionally we run up against the stingy man. He is the one who gives his battery good care, but is penny-wise and pound-foolish, and when some small adjustment needs to be made he neglects it, hoping in this way to save a few cents.

"Then we have the impulsive man, the one who will run in every week to have his battery tested for a month or so, then let it go for several months and come in with his battery in pretty bad shape. He has entirely forgotten it. He recognizes the fault as his own, and has it fixed up without throwing the blame on the poor old battery."

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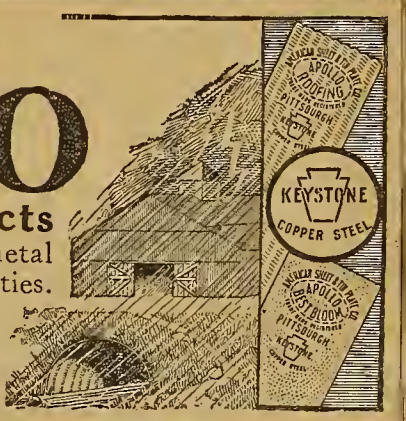

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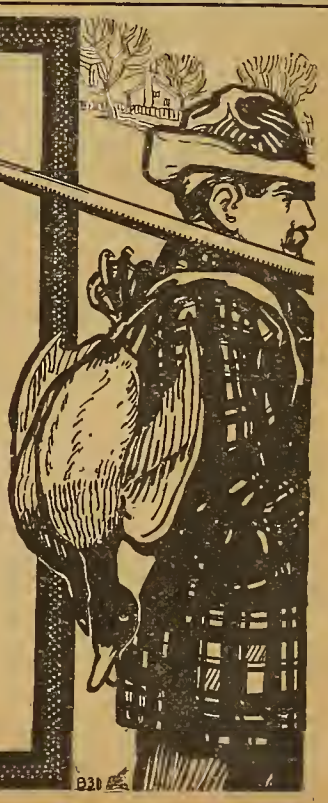

Apple Harvest at Montevista

How real preparedness and a friendly spirit of co-operation helped us to clear more than $700 in one season from a 400-tree orchard

By Hazel H. Murphy

EVER since the war began we have been shown by the Hun how important is full and complete preparation for an undertaking before the definite initial move is made. On Montevista Farm we try to make this rule of previous preparation a regular part of our apple-harvest work. For even with our comparatively small orchard of 400 heavy-bearing trees there is sure to be much loss of time and lack of accomplishment unless full preparation has been made in advance of the arrival of our apple-picking crew.

Some of the advance work we always aim to have completed is that of making sure of a supply of barrels or barrel material, plenty of picking baskets and having damaged ones repaired, sorting tables newly bottomed with canvas, a full supply of ladders in good repair, and plenty of "liners," "facers," and heading nails, also stencils for marking the barrels.

Much of this work, of necessity, is done by the men, but there are many details, including telephoning, writing letters, and booking orders, that can be done equally well by the women, if they are in a position to help.

The most important of all the before-harvest preparations we have found to be the planning of board and lodging for the hired crew, and here a woman's experience and judgment are absolutely essential. Our experience has included three solutions of this problem. One was to board and lodge the men ourselves. Another was to provide a place among neighbors with eating and sleeping quarters. The first gave me no time for work in the orchard. The second often caused much dissatisfaction among the men. So we decided last year to try a separate establishment on our own farm with which to overcome both of these difficulties mentioned, as well as to make an actual cash saving.

In anticipation of this new arrangement, we had purchased, in the spring, two portable shacks which some sawmill men had used as kitchen and "bunk" house while at work in timber lot.

Apple butter made in the open has a more delicious flavor than it has if cooked in closed containers

Before beginning the task of securing equipment, I consulted with the mill men themselves, whose experience in the management of extensive food supplies was most helpful, particularly as to utensils and the kind of meals that would be most acceptable. "*Plenty* of it, whatever it is," was their admonition. "You'll have trouble with 'em right away if they get the idea you're trying to save on 'em." This I recognized as sound advice, and took it to heart accordingly.

Through the courtesy of these men, I was able to rent all their equipment, which was not then in use. This gave me an opportunity of finding out what things would be most needed when we came to buy for ourselves. Most of the items could be purchased at any good ten-cent store. With the addition of my own fireless cooker the cuisine operations were conducted easily.

The supplies for cooking were bought in quantity in advance, at reduced prices, and any products used from our farm were charged at current prices. Though our aim had been for greater efficiency rather than any material saving in money, it was gratifying to find, when we came to figure up our costs, that, even including the wages of the man who acted as cook, the per capita daily cost was 42 cents as against 50 cents, which was the minimum price asked by those who had offered their pork and corn bread hospitality in former years.

For bedding, I made several ticks extra long and wide, filling them with clean, dry straw and placing them in the bunks, which were built one over the other in ship fashion. This was a matter of but several dollars' investment, and by replacing the straw each year they can be made to last for a number of years. The question of covering was disposed of by sending a card to each prospective member of the crew requesting him to bring one blanket.

The crew were mostly husky mountaineers who trudged in sixteen or eighteen miles with their little packs on their backs. The musicians of the crowd brought along their "fiddles" and banjos—indispensable adjuncts to their happiness and contentment. These same men have been with us at this season for years, and plan long in advance of the actual summons. It is a time when old freindships are renewed, old jokes and old stories retold: and in this spirit of mutual co-operation it has been possible to reach something like real efficiency.

Early on the appointed Monday morning all were at the apple shed, ready to resume their old posts—the young boys with picking bags and the tallest ladders; the older pickers with the half-bushel baskets with the hooks on the handles; and Berney, the clown of the party, who is the driver of old Nelly and the "pickin' cart."

Before work was begun, my husband repeated the usual admonition about not breaking branches, not tearing off next year's buds, and to remember always that apples must be handled as "gingerly" as eggs.

One of the pickers, because he unwittingly made the boast that he could make fine light bread, was appointed by the others as my assistant cook, so before beginning our orchard work for the day we together worked out our plan of operations. I had decided on a menu from which I had determined to vary but little. Thus it would be possible to systematize the work and plan each operation definitely in advance:

Breakfast	Dinner	Supper
Oatmeal	Ham	Ham
Coffee	Boiled Potatoes	Fried Potatoes
Hot Biscuit	Snap Beans	Cornbread
Fried Apples	Cornbread	

After breakfast, Floyd, the cook, washed the dishes and got ready a supply of boiling water for the beans and potatoes for the fireless cooker. He then cut the day's supply of wood before taking a turn at apple-picking. At eleven he left the orchard to finish preparations for dinner.

By this arrangement, dinner for the crew was ready at twelve o'clock and, shortly after eating, preparations could be concluded for feeding the crew for the day. The rest of the evening meal was easily managed by the men themselves. Oatmeal for breakfast was put into the fireless cooker at night. By some mysterious process the cook made the biscuits on a griddle on top of the stove, and as the men seemed to be satisfied with this culinary achievement and left none to be wasted, I decided not to investigate too closely. Except for making cornbread once each day, I did no actual cooking, but kept a watchful eye for evidences of waste.

In the apple shed, first of all in importance is the packer, who, by using his brains "stid of his hands," was enabled to draw double wages and smoke cigarettes while his hawk-like eyes watched for defective apples that might get by the sorters. He also does the facing of the barrels. Then there is the header, who is kept busy all day heading the barrels. Some sorters have not the moral courage to throw out an apple merely because it has one tiny little worm hole or a slight evidence of scale. Because of the necessity for a quick eye and a delicate touch, this work is especially suited to women, and it is here that I have had my most helpful orchard experience. My husband acts as general superintendent, and his responsibilities range from the stenciling of the barrels, upon the accuracy of which so much depends, to the mending of broken ladders—or broken bones if need be.

For our orchard of 400 bearing trees, and with our crew averaging about ten men, two picking tables have proved adequate. These are made with canvas bottoms, thus minimizing the bruising of the apples as they are emptied onto the tables from the baskets, sixteen of which fit nicely into the bottom of the low orchard cart. There is a ledge on these tables for the sorting baskets, one for each grade; even the so-called culls being handled in this careful way instead of being dumped into a barrel, as is done in many orchards. By this arrangement we are able to ship for immediate sale culls which, when packed with a regular "facer," present an attractive appearance and often sell for sufficient to pay the picking and packing costs.

For some years we packed the apples under the trees, but the exposure to the weather is so detrimental to the fruit, and lost motion so unavoidable and expensive, that we built a simple packing shed large enough to hold the supply of barrels and the tables. Thus no matter what the weather may be, we can continue our packing work.

On the last day of "apple-pickin'," while the pickers are gathering the wind-blown apples and "drops" from under the trees, the sorters separate them into three lots—the best for home use during the winter, the seconds for apple butter, and the culls for cider. During this process I am occupied with box packing, which is done with the fanciest of the apples, kept for that purpose in separate barrels. The apples are wrapped carefully in squares of tissue paper, and packed with mathematical precision into "straight," "diagonal," or "jumble" packs, according to the size of the apples. Much skill is required in this operation, in order that the desired "bulge" may be obtained. A "slack" pack, though it may contain as many apples, always gives the impression of scant measure, and is objectionable for competition with the more scientifically packed boxes.

In large commercial orchards, work of this kind is very highly paid, and is largely done by women, who are kept busy from the opening of the apple season until Christmas. We have never specialized in boxed apples, packing only enough to satisfy a rather limited Christmas trade among our friends in the city.

The last night before the crew disperses they are always invited to our house to hear a piano-player and phonograph concert, this marking the climax of the harvest which to them has seemed more recreation than work. No matter how long the program may be, they sit intent and motionless through it all. When it is over, to show their appreciation, out come their fiddles and banjos, and Berney, after much coaxing, finally consents to give his inimitable clog, after which comes the more sober task of "payin' off." Then they file out, one after the other, in true mountaineer fashion, with a friendly "Wa'll, if I'm a-living, I reckon I'll see you again next apple time."

The hauling of the barrels to the station by no means ends the apple harvest for us. There are vinegar, apple butter, and dried apples yet to be attended to. The apple butter cannot wait, and must be dispatched at once.

The first time we made apple butter we sent out post cards to our city friends, telling them how the butter was made in the old-fashioned way, in a big copper kettle, stirred steadily all day, and how it was made with cider, no sugar being used for sweetening. That year we received orders for a number of gallons, and since then, without further advertising, we have been able to dispose of all that we do not need for our own use.

The first operation is to make the cider—two barrels of apples usually making about [CONTINUED ON PAGE 29]

Selecting Kitchen Utensils

By Jane Macpherson

OFTEN time is lost and fuel is wasted as a result of choosing the wrong kind of kitchen utensils. They should be durable, have a smooth finish, be easily cleaned and suited to the purpose for which they are intended.

Tin makes a satisfactory utensil for most quick baking processes, as it is light in weight and heats and cools rapidly. The best grade is the heavy block tin. Pure tin is soft and pliable, and consequently iron or steel are often used as a foundation. If this foundation material is exposed by scraping or scratching the utensil, rust will attack the iron.

Enamel, agate, and granite ware are made on iron or steel foundations. Should the enameling material become chipped, the iron body soon will rust. Often utensils of inferior quality are sold as bargains, and soon chip and rust. The pure-white and the blue-and-white enamel wares are not suited for cooking processes where great heat is necessary. The gray and brown varieties are much more durable.

Aluminum is attractive and of light weight. There is no danger of chipping or rusting this material. It is very desirable for many processes of cooking, as it heats rapidly.

Iron is used for processes of cookery where a high temperature is necessary. It is durable if kept dry and free from rust. When not in use it should be coated with saltless grease to protect it.

Earthenware is used for long, slow cooking or baking processes. The lids of earthen baking dishes should fit tight to keep in all moisture and heat.

Cooking utensils made of glass are attractive, easily cleaned, and sanitary. Such utensils have been proved successful for baking processes when made of a material which can be subjected to high temperatures with no injurious effects.

Utensils should never be bought until needed. When selecting cooking utensils, choose articles with smooth-finished rims and made of one piece of metal. Avoid seams and useless curves, as well as dirt-catching handles. A heat-resisting wood makes the best handle.

Recipes for Cool Days

CHICKEN CURRY—Add two cups cold chopped chicken to two cups white sauce; season with one teaspoon curry powder, heat thoroughly, and dish into the rice. Mushrooms and a little celery top, chopped fine, may be used instead of curry powder. Stock in which the chicken has been cooked may be used instead of white sauce in preparing this dish.- Thicken the stock as for chicken gravy, season to taste, and add chopped chicken.

SWEET-SOUR STEW—This may be made of meat, or merely a meat bone to produce a good stock is equally nice. If meat is used, select a cheap cut of beef. Cut into pieces of proper size for serving; put over the fire in sufficient water to cover well, and cook until tender. Remove the meat, and add an extra pint of water, one-half cup vinegar, two tablespoons sugar, salt to season, and two or three whole peppercorns if they are at hand. Peel and cut into rather thin slices enough potatoes to make one cup, enough turnips and carrots to make one-half cup each; a sweet pepper from which the seeds and inner skin have been removed is cut into thin slices or rounds and added with the other vegetables, also one cup finely shredded white cabbage and, if liked, a medium-sized onion, sliced thin. Cook until the vegetables are tender. This will require about half an hour. A few minutes before time to serve, add the meat and let it heat in the stew. Serve very hot. This is fine on a cold day.

NEW ENGLAND ROAST—One pound cooked beans, one-half pound cheese, bread crumbs, salt. Put beans through the meat grinder. Add the cheese and enough bread crumbs to make the mixture sufficiently stiff to form into roll. Bake in moderate oven, basting occasionally with tomato juice.

COTTAGE CHEESE SAUSAGE—One cup cottage cheese, one cup dry bread crumbs or one-half cup cold cooked rice and one-half cup bread crumbs, one-fourth cup peanut butter or two tablespoons savory fat, one-fourth cup coarsely chopped peanut meats, one-half teaspoon powdered sage, one-half teaspoon thyme, one tablespoon milk, one teaspoon salt, one-fourth teaspoon pepper, one-third teaspoon soda, one tablespoon finely chopped onion. The bread crumbs may be made from left-over corn, barley, or other quick breads. Cook the onion in the fat until tender but not brown. Dissolve the soda in the milk and work into the cheese. Mix all other dry ingredients thoroughly with the bread crumbs. Blend peanut butter and onion with the cheese, and mix with them the bread crumbs. Form into flat cakes, dust with bread crumbs or cornmeal, and fry a delicate brown in a little fat in a hot frying pan.

SAUSAGE ROLLS—These baked rolls are very appetizing and are easily prepared. Make a baking-powder biscuit dough; roll out in a sheet about half an inch in thickness, and cut into small squares. Have ready any good sausage mixture—pork, beef, or a mixture of left-over meats, well seasoned. Form into small cakes, place a cake in the center of each small square of the dough, bring the ends to the top and press together firmly; place in a buttered baking tin, the edges not touching, and bake for about twenty minutes. Serve hot, with or without gravy.

BEAN LOAF—Two cups lima beans, one cup dry bread crumbs, four tablespoons peanut butter, two tablespoons grated onion, one tablespoon drippings, one tablespoon dried celery leaves or poultry seasoning, two teaspoons salt, one-fourth teaspoon pepper, one cup rice stock or other liquid. Wash and soak the beans overnight, then cook in boiling water till soft—about forty-five minutes. Drain, and when cool chop coarsely. Add crumbs mixed with seasonings and peanut butter, then add liquid and fat. Put into a greased bread pan and bake in a moderate oven thirty minutes. This yields eight servings.

Clover-Leaf Edge for Scarf

DIRECTIONS for this fascinating pattern will be sent to you on the receipt of four cents in stamps, by the Fancy-Work Editor, Farm and Fireside, Springfield, Ohio. Order No. FC-109.

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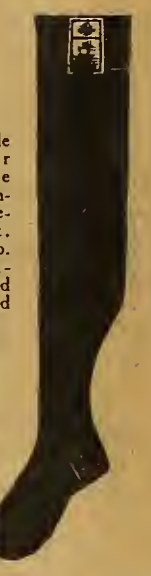

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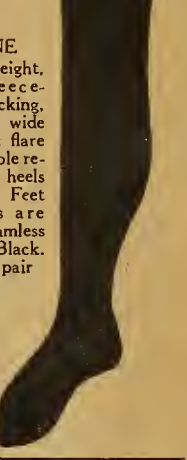

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A MAN who tried to act as he thought his associates who like to have him act, tells in the November *American Magazine* how he was beaten to a frazzle in the business world by a plain, commonplace chap who tended strictly to his business and didn't "act" for the benefit of anybody.

And when the choice of a new general manager lay between him and this other chap, this is what the president of the company said to him:

"I like you a hundred times better than Hay, of course. You're human, and you're interested in the things I'm interested in, while Hay sometimes bores me half to death. But he certainly does know the business, and when it comes to making things shipshape in case of my death, I've simply got to tie him tight."

You know folks like this man, who "acts" to please others, and you'll be interested to learn from his story just why they are on the wrong track.

You probably will like a lot of other things in the November *American Magazine*, too. Charlie Chaplin tells in a signed article how he makes you laugh. A fighting man tells what sins the soldier hates. And Owen Wister takes the hide off those half-patriots who hold "the ancient grudge" against England while pretending to be strong for the Allies.

The American Magazine always prints things like that. Articles which "touch the spot" in your reading appetite.

The American MAGAZINE

Published by THE CROWELL PUBLISHING COMPANY

Also Publishers of the *Woman's Home Companion* and *Farm and Fireside*

Cashing In on Old Hens

By Robert L. Winters

EVERY month that a loafing hen lives these days she cuts down her year's net income—providing she had any—about 30 cents. Thus it is easy to see that when we allow hens to loaf from July, or earlier, until the holidays and consume more value in feed than they have yielded profit during the balance of the year, such hens are helping the Hun. A plan of culling the layers which is now being more and more employed in various poultry districts of the East is the following:

Expert poultrymen from the state colleges of agriculture, during the summer when their work is not pressing, make journeys through the districts where poultry is most largely kept, and help cull out the non-layers and furnish other helpful advice, such as selecting the best yearling hens to be used for breeders the next season.

Instances are not few where such culling and selling of the non-laying hens have reduced the feed bills fully 40 per cent. Last summer one Rhode Island poultry expert culled 3,000 hens from farm flocks aggregating 7,556 hens. The effect of disposing of about 40 per cent of the flocks culled was to reduce the egg production only 5 per cent. This goes to prove beyond question that a well-trained poultryman can pick the loafers from the layers without difficulty.

Here is the plan being followed by S. O. Bryant for realizing the highest value from his hens, after learning the rules for

A popular social center on a hot day

culling hens made use of by poultry experts above mentioned.

"Soon after the hatching season is over, when spring chickens are still scarce," he says, "is the time when I weed out all the old hens that are not good prospects for summer and fall layers, but they are first put into the best possible condition.

"I pen the culls in a comparatively small enclosure and for about two weeks feed them all they will eat of cornmeal mixed with sour milk. This fattens them rapidly, and makes the feeding profitable even at present high prices of grains. I feed the culled hens all they will eat three times a day, but do not leave any soft food in the troughs between meals.

"I find that these heavily fed hens will consume lots of drinking water, and we encourage them in this, as it helps to add to their weight.

"The fattening pen is so arranged that the hens will have shelter from the sun during the hot hours of the day, while the slatted crates provide plenty of fresh air at all times.

"Hens fattened in this manner on pure, sweet products come to the table with fat globules deposited among the meat fibers, which simply melt through the flesh in cooking. This produces a carcass that is tender and sweet and without the stringiness commonly found in old hens. As a natural result our hens command the top market price per pound, and weigh an average of at least a pound apiece more than when taken directly from the flock and marketed without special crate feeding to fatten them.

Carbolic Acid for Mites

By E. V. Laughlin

I FIND that the following plan makes it comparatively easy to free the woodwork around the roosts of mites: Mix linseed oil and carbolic acid together, using two ounces of acid to each gallon of oil. Apply to the woodwork with a paint brush. The oil soaks into the wood, carrying the acid with it. The mites will be suffocated in the mixture, and will be entirely eradicated.

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—Del Dane

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Winter Clothes from New York Shops Which Miss Gould Offers to Buy for You

YOU have to watch your pocketbook in these days of high prices, and when you see a dress bargain take advantage of it. Miss Gould has been bearing in mind the high prices, and the clothes pictured on this page are a result of her work. They are not only reasonable in price but the quality is excellent and the style most fashionable. As the stores are finding it almost impossible to get an unlimited supply of merchandise, it will be well to send in your order early to be sure of the garments pictured on this page.

No. 43—Velvet hat, $6.50

No. 44—Kitt lynx scarf, $18.50

No. 45—Nightgown of flannelette, $2

No. 46—Sateen petticoat of superior quality, $1.95

No. 47—Washable silk blouse, $3.50

No. 48—Worsted tailored skirt, $4.95

No. 49—Crêpe meteor dress, $13.95

A HAT that can be worn on almost any occasion is much to be desired. No. 43 pictured on this page is just that kind. It has the new soft crown and the double brim effect, the upper one shirred and between the two a wreath of velvet flowers and metallic leaves. Black Lyons silk velvet. Price, $6.50.

It does not pay to buy cheap furs—inexpensive ones yes, but the quality must be good. No. 44 pictured on this page is a scarf of the fashionable kitt lynx, which is a very durable soft fur sure to be becoming. It comes in black or taupe, with soft satin lining to match. Price, $18.50.

No. 45—When the cold winter nights come this gown of flannelette will be found most comfortable. It comes in white with pink or blue stripes. Sizes 34 to 42 bust. Price, $2.

If you want a petticoat that will give service choose No. 46. The frilled and tucked flounce makes it a good-looking model. Color, navy, Russian green, purple, or black. Lengths, 36 and 38 inches. Price, $1.95.

No. 47 is just the kind of waist every woman needs. It's of fine washable silk, white with narrow stripes in rose or blue. Sizes 36 to 44 bust. Price, $3.50.

A separate skirt fills many needs, especially if it is well tailored and of plaid material. No. 48 is a worsted with smart pockets and belt, button-trimmed. Colors, blue and green, brown and green, or brown and blue fine plaid. Sizes, 23 to 30 waist. Price, $4.95.

And then there is the dress for "special occasions." Something not too conspicuous, yet dainty in its trimming. This model No. 49, of crepe meteor with corded belt and tunic, has an attractive collar and vestee of white georgette, embroidered. Color, navy or black Sizes, 16 and 18 years, 36 to 42 bust. Price. $13.95.

HOW TO ORDER: Send your order to the Fashion Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York City. Be sure to state size and color. Write your name and address plainly. Remit either by bank draft, post-office money order, express money order, or check.

In case you send currency, be sure that the letter is registered. We cannot be responsible for money lost in the mails.

No garment sent C. O. D. or on approval. Your money back if you do not like the garments. All goods must be returned within three days of their receipt. Return them directly to the firm that makes the shipment to you—not to FARM AND FIRESIDE—by insured parcel post or prepaid express. We cannot be responsible for returned packages lost in transit unless sent as directed. In sending in your order be sure to give full address and complete measurements.

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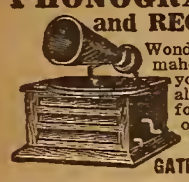

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Get the original National Giant Portable Smoke House.

Beware of Imitations or Experiments.

A Nutty Party for October

By Emily Rose Burt

A GIRL who wanted to give an inexpensive jolly little party in October, in honor of a visiting friend, issued invitations to a "nut-gathering."

At the top of each correspondence card, which served as an invitation, she glued half an almond shell upon which a face was marked in ink. Below this nut head the rest of the figure was drawn in ink on the card, and the inscription read:

Pretend you're a squirrel for once,
And join my nut-gathering stunts
Friday, October the eleventh,
at half-past eight

The first amusement of the evening was introduced by suspending from the chandelier, in the center of the room, a cocoanut decorated with a comical face and a pointed paper cap perched on top of it.

Each person from a distance of ten feet was allowed three throws at this cap with a little light rubber ball; the object was to knock Mr. Cocoanut's hat completely off, and the best marksman won a prize of cocoanut kisses.

This first nut stunt caused so much fun that no one wanted to be lured away to a Nut Exhibit. Ten varieties of nuts were represented by pictures or objects, and little slips of paper and pencil were distributed for recording guesses.

The display was as follows: 1. A bit of butter on a plate. 2. A stout old-fashioned stick. 3. A can of canned peas (indicated on label). 4. A single pea. 5. A map of South America with the outlines of Brazil especially prominent. 6. A picture of a typical English stone or brick wall. 7. A can or cup of cocoa. 8. A photograph of Hazel Dawn the movie star. 9. A beetle specimen (dead or alive). 10. Three ears of corn arranged to form the letter A.

Answers: 1. Butternut. 2. Hickory nut. 3. Pecan nut. 4. Peanut. 5. Brazil nut. 6. English walnut. 7. Cocoanut. 8. Hazel nut. 9. Betel nut. 10. Acorn.

The winner of this contest received as a prize a peanut doll.

Of course, a nut party would hardly be complete without a peanut hunt, and there was also a peanut race in which the object was to transfer the peanuts from one end of the room to another on the blade of a table knife.

In still another peanut contest the object was to pitch ten peanuts into a narrow-necked jar at a distance of about twelve feet.

To choose partners for refreshments a basket of English walnuts was passed, each little nut with a painted face and a patriotic cap of some sort. White sailor caps, blue sailor caps, naval officers' caps, infantry caps, artillery hats, overseas army caps, Red Cross nurse headdresses, Scotch tam-o'-shanters and bonnets, Anzac hats and French sailor tams were all represented. There were only two of a kind, and the two individuals who selected them were of course partners.

In addition, each nut proved to be only a hollow nut shell; in each was a conundrum, in its mate was the answer.

The refreshments were fittingly frugal, and as nuts are war-time fare they comprised most of the menu. There were nut bread sandwiches, peanut butter sandwiches, hot cocoa, cocoanut macaroons, and peanut brittle.

NOTE: A list of nuts to crack will be sent on receipt of a stamped self-addressed envelope, by the Entertainment Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York City.

"There has been an—accident. If the ladies—" He broke off, his voice shaking. in spite of himself.

His meaning was clear. Mrs. Meredith screamed softly and toppled over in the arms of her husband, who seemed only too glad of the necessity of removing her. The others showed their excitement in horrified exclamations. Agatha alone was silent, standing very still and white.

"There is a light to your left, Leslie." Mrs. Debrett was quite the mistress of herself. Whatever the emotions of this splendid woman, there was not so much as a tremor in her voice to indicate them.

Without a word Steele snapped the switch. In the sudden flood of light I could see a dark figure huddled at his feet. The spectacle was too much for young Quan. Mumbling something about water, he fled into the dining-room and did not reappear. Quigley remained rooted in the background, twisting his hands feverishly and swallowing hard.

My interest centered on Agatha. She seemed stupefied by the dreadful affair. Then, suddenly, her strength deserted her utterly. She collapsed into a chair, giving way to a passion of violent weeping.

Her sobs were not the mere consequence of hysteria or shock: they were the expression of a soul tortured to its depths. More than ever I wondered at the nature of her connection with the unfortunate Carter.

I TURNED from her to watch Steele. He was standing immersed in thought, his chin in his long, supple hand, seemingly oblivious to things and people around him. He possessed, I well knew, a mind with a peculiarly photographic faculty of recording visual impressions almost instantly. In a single glance he had made a mental record of everything visible, and I was confident that nothing of material value had escaped his keen scrutiny. More than once I had observed this uncanny, quite unconscious, and rarely utilized quality in him. My experience made me feel that he was the best possible person to be in command of the situation. The others appeared to be in accord with me on that point.

Quigley broke the painful silence.

"Don't you think we ought to call the police?" he suggested timorously.

Agatha roused herself at his words to protest earnestly.

"I beg you—please," she cried. "The notoriety would be—horrible!"

"But my dear," said the admiral soothingly. "If—"

Steele interrupted him.

"There will be no need for the police," he said quietly. "A doctor, possibly—"

Agatha leaped to her feet, a great question shining in her eyes.

"You mean—"

Steele's lethargy had left him, and he was bending over the prostrate form at his feet.

"Mr. Carter is not dead."

"Oh—thank God!" The relief in Agatha's voice was ineffable.

Steele suddenly straightened.

"Quiet, if you please!" he commanded sharply, his hand upraised. He seemed to be straining his ears for something, his eyes drawn together in a look he had when

[CONTINUED ON PAGE 30]

The Mystery at Glen Cove

[CONTINUED FROM PAGE 18]

room, with the rest of the party at his heels.

He halted when he reached the little closet which housed the telephone. The door was closed. He paused for a moment, listening intently. No sound was audible. Then, resolutely, he tried the door. It was locked.

He turned inquiringly to the admiral, and I could see his muscles twitching nervously under the stern set jaw. The old gentleman nodded.

Without another word Steele put his big shoulder against the door. There was a crackling of wood and a snap as the lock gave, and he plunged into the darkness within. An ejaculation escaped him as he recoiled. Then he turned to us with a grave gesture.

Making Homes Beautiful

IF THE approach to my home is bare, overcrowded, or untidy, friends who may drop in to call or visit me receive a bad first impression, no matter how attractive the house itself may be.

A well-kept blue-grass lawn is the best beginning or foundation for a front approach to a home. Having that and a few graceful shade trees so placed as to furnish protection and not to shut off the best views and spoil the beautiful stretches of green lawn, then we are ready to consider flowers or dwarf shrubs, the walks and driveway, to complete the home setting.

Frequently, bare and unsightly house foundations can be screened and improved wonderfully by setting clumps of dwarf shrubbery or groups of such flowers as the canna, salvia, or vinca quite near to the house and porch foundations.

Flowers for cutting are much more satisfactory when grown elsewhere than in the front yard, thus avoiding the ragged, unsightly effect that results when flowers must be closely cut for bouquets and decorations.

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A Kalamazoo Direct to You

Ledrans, a Farmer of France

[CONTINUED FROM PAGE 7]

farm machinery and a complete dairy equipment.

Foresight on the part of France has fortunately made it possible for the *mutilé* farmer to obtain money readily through the agricultural mutual loan banks, whereby he is able to purchase a small holding to which he may add as he prospers, and thus become at once a proprietary farmer. There is a bank of this kind in each *département* (political division of France, similar but not analogous to our States) backed by the French Government and extending to the small holder two forms of credit—long-time and short-time credit, at low rates of interest.

All this France is doing to place her maimed men on an equal footing with their physically able contemporaries. Farming projects are particularly interesting to the married man, for it insures a home for his family under conditions admittedly preferable to those under which the city toiler lives, where he can bring up his children in pleasant, healthful surroundings, under God's sunlight, amid God's fields, where the poor *mutilé* himself can retrieve a measure of his lost physique and power.

One Road to Happiness

[CONTINUED FROM PAGE 9]

finished, 2,500 gallons of kerosene, 150 gallons of cylinder oil, and for spark plugs and any other repairs I have allowed $25. This will total $500. I have allowed no depreciation on the tractor because several of our horses are rather old, and after this season's work are not worth what they were at the start. For this reason, and calling everything else equal, I have figured that the tractor has saved us $588 this season."

"Don't you think, Father, that in another year we can sell a few more of our horses?" asked Jim.

"Yes, indeed. I would have sold them before, but I wanted to be sure the tractor would do the work. I am convinced now that it is the most economical form of farm power one can buy. Outside of the field work, we have used it on our big corn grinder, on the sheller, and to saw wood, while this fall will see it hooked up with the shredder."

Apple Harvest at Montevista

[CONTINUED FROM PAGE 24]

twenty gallons of cider—which we boil down two thirds, skimming frequently. When one and a half barrels of "snits" have been prepared, we are ready to begin feeding in. Two people are employed to keep constantly stirring with the long-handled wooden ladles. After the last of the apples have been put in and the thickening begins, great care is required to prevent burning.

To determine when the butter is done, we pour a little into a saucer and turn it upside down. If it will not spill, and if there is no cider separating f om it on the sides, the butter has been sufficiently cooked and can be put at once into stone containers.

This record of the last three years will give some ideas of the returns we realize from our small apple orchard.

COST OF PRODUCTION

	1915 (550 bbls.)	1916 (200 bbls.)	1917 (425 bbls.)
Pruning	$54.00	$31.00	$43.00
Spraying	142.00	112.00	122.00
Picking & Packing	209.00	80.00	178.50
Barrels	220.00	84.00	178.50
Hauling	55.00	20.00	53.00
Overhead	50.00	50.00	50.00
	$730.00	$377.00	$625.00
Receipts	1,087.00	642.00	1,350.00
Net profit	$357.00	$265.00	$725.00

SUPPLIES USED FOR BOARDING TEN MEN TEN DAYS.

Flour (60 lbs.)	$3.75	Baking Powder	$0.30
Meal	3.15	Coffee	.66
Salt	.06	Molasses	.70
Ham (two shoulders)	11.01	Sugar (10 lbs.)	1.00
Oatmeal	.50	Total	$27.62
Lard	2.25	Wages (cook)	12.50
Snaps	1.50		
Potatoes	1.50	Total (10 days)	$40.12
Apples (culls)	.75	Cost per day	4.01
Milk	.50	Per capita cost	.40

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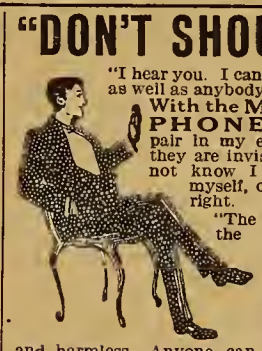

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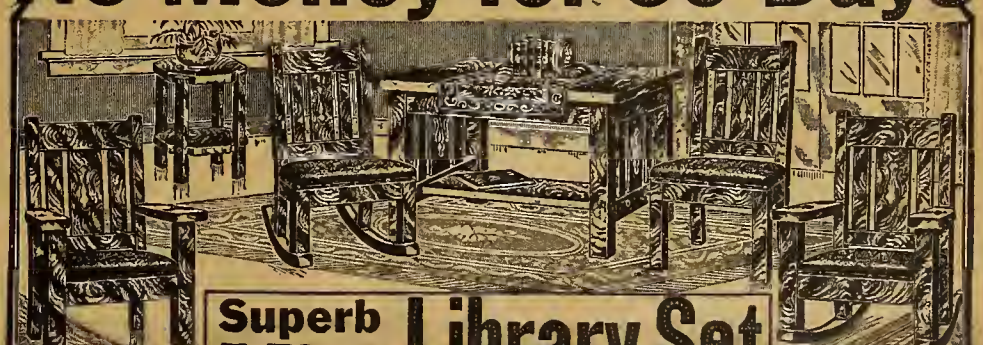

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The Mystery at Glen Cove

[CONTINUED FROM PAGE 28]

profoundly aroused. It transformed him utterly. The easy nonchalance of his ordinary manner had dropped from him like a cloak.

He turned abruptly to me, and his finger crooked imperiously.

"I want you, Jimmy," he almost whispered.

I had heard that tone from his lips and seen that smouldering blaze in his eyes perhaps half a dozen times in our long intimacy. Without exception it had signalled a resolve in the soul of Leslie Steele which boded ill for those who stood in his path. Once it had been my grievous fortune to play the rôle of obstacle. I am quite certain that I shall never, consciously, play it again. The soft indolence of the man could turn, under provocation, to the most relentless determination.

My reflections made me lag a little, and I was a few feet behind him as he darted through the hall toward the front door. Once outside I followed him by his running footfalls, for in the inky blackness of the night I could not see him. He was cutting directly across the lawn, and I guided myself after him by the crashing of the shrubbery. He was running at a good pace, and I, with my years and bulk, had some difficulty in keeping up with him. I was pretty well blown when, after an upsetting encounter with an ill-disposed root, I floundered out into an open space, and found myself before the garage.

STEELE had managed to locate the electric light and switched it on. He had left his roadster in the garage earlier in the evening, its anatomy having required expert attention from the Debrett chauffeur. Why it should be wanted now I could not imagine, but that it was was plainly evident. My companion was already in the seat, with the starter grinding away.

"No go!" I heard him growl "It's fixed, all right. Here, Jimmy, take the crank and turn her over."

"You mean Raoul failed to attend to it?"

He shook his head as he leaped from the car and began rummaging under the seat.

"No, he did his part all right. This is something else. Well, are you going to help?"

I asked no more questions, but complied with his blunt orders as best I could, applying my back to the reluctant crank, while he stood beside me, his hand resting quietly on the engine.

"Might I inquire as to what you're doing now?" I asked, a little aggrieved at his repose as contrasted with my sweating toil.

"There's no spark," he replied absently. "That'll do for a moment."

"You mean I've been blistering my hands these five minutes to no purpose?"

He ignored my petulance.

"I think they've cut the secondaries."

He peered busily into different parts of the machinery, and I could hear him muttering to himself. "Gas all right. Mag all right. Yes, that's the ticket. I've got it, Jimmy. Pretty crude job, too."

"You've found the trouble?"

"Yes, just what I thought. Fix it in a minute. I'll just . . ." The rest of his words were lost, as his head disappeared in the dark mysteries of the motor. Save for occasional brief commands to fetch him some tool from his kit, or an oath as a wrench slipped from his oily fingers, he worked silently. It seemed no more than a minute before he brought down the hood with a clatter, swept all his tools crashing into their box, and leaped to his seat.

"Now then, Jimmy," he exclaimed, "we'll show 'em things!"

The powerful lights of the machine bored into the mine-like blackness, and we roared down the winding driveway of the Debretts' at a pace which made me feel my years.

"Would you mind telling me what this is all about?" I shouted, the wind whipping the words from my teeth. Telegraph poles went by like a picket fence, and I careened crazily on my insecure seat.

Steele's only reply was a query as to whether I could see any lights ahead. I gave up, for the time being, any thought of interrogation, and devoted myself exclusively to the task of remaining with the car.

We passed other cars so fast that they seemed to be going backward. We roared over a bridge like a cat taking a back fence. We took curves on what I was sure must be a single wheel. A muddy stretch of road almost threw us off into a swamp. We missed a tree by a fraction of a millimeter. The smell of hot paint mingled with the cool ozone of the night.

Then, in an instant, all the awful swerves and tosses of the car, all the paper-thin escapes, were forgotten, as the thing, like a demon possessed, shot off at a tangent into the ditch and out again, describing a semicircle in its flight, and headed for a wall on the other side. I gripped tight and held my breath. Steele's hand leaped lightning-like to the lever at his side, and with a shrieking protest of brakes the monster came to a reluctant stop, not a foot from a grim expanse of brick that looked a mile high. My companion was out of the car before I knew it.

"Get the jack out!" he ordered. While I obeyed he was rapidly attaching his trouble lamp. In another moment he had the wheel jacked up and was carefully examining the flattened tire. Suddenly he whistled softly.

"This was a brand-new tire, Jimmy—look!" He held out a small object which glistened in the dim light. Before I could do more than give it a quick glance he had removed the jack to another wheel and called for the trouble lamp. Rapidly he turned the tire around, feeling with his hand. Then he swore under his breath.

"By the Great Horn Spoon!" he muttered. "They weren't so darned clumsy after all. Here's another, Jimmy, for your collection."

I took the bit of metal he held out to me.

"You don't think these could be accidental?" I regretted the question immediately, in the withering glance he shot me at.

"Accidental? My dear fellow, do you know what they *are*?"

"Why—er—they *look* like thumb tacks."

"Exactly. And that's just what they are. Now, you don't usually find thumb tacks on country roads, do you?"

"You might," I declared stoutly.

"Yes, you *might*. But you don't think you'd be likely to pick up one in each of your four tires, do you, Jimmy?" As he spoke he was going over the remaining wheels in rapid examination.

"What do you make of it?" I asked humbly.

He chuckled in unconcealed admiration.

"By jiminy, they're shrewder than I ever dreamed!" he cried. "I misjudged them from the way those wires were handled. They were simply yanked from the plugs—no trick at all to fix them. But this—why this is masterly."

"But why didn't they cut the tires outright?" I asked. "It would have been much easier and more certain, I should think."

"Because, you dear old numbskull, they weren't just ordinary vandals—they were geniuses. They stuck those thumb tacks in the rubber just enough to hold. They reckoned that before the wicked little things got pushed through into the tubes we'd be out on some lonely road, a devil of a long way from help, and there we'd have to stick. Which is, Jimmy, old boy, exactly what happened." He laughed a little ruefully, and sat down on the running board.

"WHAT is the next step?" I asked after a pause.

"Sit here till a car passes," he replied succinctly, puffing at a cigarette. "You don't mind, do you, Jimmy? If you do, you can walk."

"Not at all," I said truthfully. "In fact, I'm rather glad of the intermission in this melodrama. Perhaps now you can find sufficient leisure to answer my questions?"

"Delighted, old boy! What are they?"

"Well, to begin with, what did you think you heard when you stood there at the Debretts', listening like a pointer?"

"A motor car."

"My dear Steele," I cried in exasperation. "Do try to be reasonable. Surely you aren't asking me to believe that the mere sound of an automobile was sufficient to send you dashing forth on a flirtation with death."

"Quite so, Jimmy, old sleuth. But that particular car was on the Debretts' grounds, and it was going away."

"Even so—I don't understand."

His reply was simple, and yet profoundly complex.

"It was Mrs. Brandt's car."

"You mean you could recognize her car by the mere sound?" I demanded incredulously.

"Easily. Cars have inflections just like people."

"I shall have to take your word for it," I hesitated. "So you dashed out in mad pursuit of—her?"

He was silent for a moment.

"I didn't say that," he murmured. "I—"

"Then what *are* you after? Heavens and earth, man, as your suffering partner in this mad chase I think I am at least entitled to know its objective."

"I wish to God I knew!" His exclamation was as surprising as it was manifestly heartfelt.

Suddenly I made a resolution.

"Leslie," I said bluntly, "what part in this evening's business was played by Mrs. Brandt?"

HE SHRUGGED his shoulders, eying me with the pathetically harried expression one sees in wounded animals. It was painful to go on with what I had to say, but I felt it my clear duty.

"You are under the impression that Mrs. Brandt and this man Carter had never met before this evening, are you not?"

"I saw them introduced," was his plainly perturbed reply. "Agatha was the only one there he knew."

"I am sorry to have to tell you this, Leslie," I said wretchedly, "but you are mistaken!"

"Oh, nonsense, Jimmy," cried Steele with a touch of his old derisiveness.

"No, listen. You will recall that as you enter the Debrett house you can see a mirror at the far end of the hall. Well, as I came in to-night I caught a glimpse in that mirror of Mrs. Brandt and Carter talking very earnestly."

"Optical illusion!" sneered Steele, rather uncertainly.

"I made some sound and they parted, but not until—they had *kissed*, Leslie."

Steele made a profound effort to be facetious.

"And it's your pleasant conjecture, Jimmy, that having expressed her affection she forthwith proceeded to shoot him, eh?"

"Hell hath no fury, you know," I replied. "It was significant that it was *she* who did the kissing."

"You're an ass!" growled Steele, to cover the hurt in his heart.

"All through dinner," I continued, affecting to ignore his plain reluctance to hear me, "the conviction grew upon me that those two were not strangers."

Steele suddenly roused himself.

"All right, Jimmy," he gritted resolutely through teeth that I knew must hold back a sob, "I'll grant you that Carter was not what he seemed, and that they weren't the strangers we thought they were. But that Marie Brandt shot him . . ."

"My dear lad," I urged kindly, "how else can you explain her sudden—"

"I can't explain anything—yet," he interrupted harshly. "But I want you to listen to me for a moment."

"By all means."

"Well, then, Carter knew he had a fine chance of getting a bullet in him."

"And how do you deduce that?"

"I don't deduce it: I know it."

"You know it?" I was impressed by the certainty of his tone.

"Yes, the man wore a bullet-proof undervest. It saved his life. The shot glanced off and made a flesh wound in his shoulder. He was merely unconscious from shock—and something else,"

"But how does that exonerate—" I did not have the heart to finish my cruel question.

"From the hole in his coat I think he was shot with a .44."

"Could she not have possessed herself of a .44 as well as of any other caliber?"

"Sure she might. But even if she'd gone after him with a 42-centimeter cannon, she—she—why, hang it, Jimmy, you confounded old ghoul, if she'd used a whole battery of guns it wouldn't have made little red marks on his neck!"

I was startled.

"I don't understand."

"Nor I. But this much is certain: some person or persons unknown had their fingers on that poor devil's throat. Maybe Marie could have shot him, but you'll have a hard time persuading me that she could have strangled him."

[CONTINUED IN THE NOVEMBER NUMBER]

Three distinct advantages of the 20 gauge gun

WHAT accounts for the increasing popularity of the 20 gauge gun, when only a few years ago the 12 gauge was considered the lightest gun that could be used effectively?

Aside from the fact that shooting with the 20 gauge gun provides keener sport for the hunter, three distinct advantages mark the 20 gauge shotgun as an ideal weapon for veteran or novice.

1. *Economy*—Ammunition for the 20 gauge gun is less expensive. With results just as effective, this is an important item to many hunters. Ammunition is also lighter to carry. Recoil is slighter.

2. *Light in Weight*—The 20 gauge gun is not burdensome to carry. With superb balance it is easy to point and quick to handle. You can get onto your game quickly, which offsets any handicap that a quick opening shot pattern may impose.

3. *Does not mutilate*—At the range at which most small birds are bagged, the quick opening pattern of the 20 gauge gun does not mutilate the game. Its pattern is sufficiently even to insure a "kill," but you do not find your bird filled with shot, or portions torn away by dense shot clusters.

These three advantages make the Winchester Model 12 in both 20 and 16 gauges a big seller to farmers and other sportsmen. Men who have used this gun, with its smooth, reliable action and its perfect barrel, find it difficult to go back to the heavie 12 gauge gun.

How the barrel is bored

Men who know guns realize that the accuracy and durability of a gun depend primarily upon the barrel. The barrel of the Winchester Model 12 is bored to micrometer measurements for the pattern it is meant to make. The degree of choke exactly offsets the tendency of the shot to spread. Until its pattern proves up to the Winchester standard, no gun can leave the factory. The nickel steel construction preserves the original accuracy forever.

The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that, with proper care, will last a lifetime.

What (W P) means

Look for this mark on the barrel of a Winchester gun. It means that the gun has been subjected to the *Winchester Definitive Proof* test. It stamps the gun with Winchester's guarantee of quality, which has 50 years of the best gun-making reputation behind it.

Every gun that bears the name Winchester, and that is marked with the *Definitive Proof* stamp, has been fired many times for smooth action and accuracy. It has also been fired with excess loads as a test of strength. At every stage of Winchester manufacture, machine production is supplemented by human craftsmanship. *Every Winchester gun is perfected by the test and adjustment process.*

It is this care in manufacturing that has produced in the Winchester Model 12, 20 and 16 gauge, and the Model 97, 16 gauge, for those who prefer hammer action, shotguns that have won the admiration of sportsmen everywhere.

Write for details of Winchester shotguns and shells

Write for the detailed specifications of the Model 12 and Model 97, and also for our new booklet on shells.

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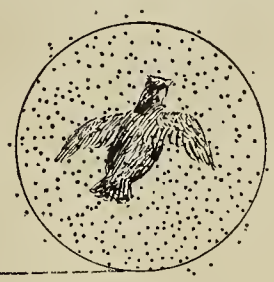
Dept. C21 **New Haven, Conn., U. S. A.**

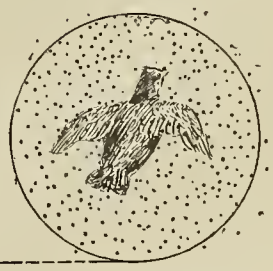
15 to 25 yards



Most quail, snipe and prairie chickens are killed at 15 to 25 yards. At these distances the Winchester Model 12, 20 gauge shotgun opens up and makes its best pattern—the famous Winchester game-getting pattern

30 to 40 yards

Heavier gauge guns do not make their best patterns short of 30 to 40 yards. The 12 gauge throws more shot, but at the range most upland birds are killed, it throws the shot in a more compact cluster. If a hit is made at a lesser distance, therefore, the chances are that the game will be mutilated



Model 97. Take-down Repeating Shotgun. Made in 12 gauge, weight about 7¾ lbs.; in 16 gauge, weight about 7½ lbs. The favorite with shooters who prefer a slide forearm repeating shotgun with a hammer

WINCHESTER

World Standard Guns and Ammunition

Model 12. Hammerless Take-down Repeating Shotgun. Made in 12 gauge, weight about 7¼ lbs.; in 16 gauge, weight about 6 lbs.; in 20 gauge, weight about 6 lbs.—more popular with women and new shooters because of its lightness and very slight recoil

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When The Monitor Stove Company announced that it had perfected a furnace which would heat the home more uniformly and economically than ever before and without the use of pipes, many people said it could not be done. Today the message of Caloric comfort has been heard and heeded around the world.

Marconi and Monitor have safeguarded the lives of men and their property by making use of relatively simple natural laws. Both have accomplished remarkable results through inventions which are protected by patents.

PIPELESS CALORIC FURNACE

TRADE MARK REG'D

TRADE MARK REG'D

The Original Patented Pipeless Furnace

has revolutionized the heating of homes, churches and business buildings. Instead of using numerous heat-wasting pipes and registers, it heats by Nature's Method, utilizing the gentle air currents and distributing balmy, healthful warmth to every room. It does this with only one register and no pipes, thereby making possible unequalled fuel economy, comfort and cleanliness. More than 50,000 successful installations have proved that the Caloric system of heating is the most adaptable and efficient for the average type of building. Hundreds of Caloric users in all parts of the country have written convincing testimonials in which they tell us of the great satisfaction this furnace has brought them.

The Caloric is sold under our Monitor Ironclad Guarantee, which insures the purchaser of a uniformly and economically heated home. Our ninety-nine years of experience in the manufacture of heating appliances and our reputation for square dealing stand back of this written guarantee. You take no risk when you buy the Caloric.

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FARM AND FIRESIDE

The National Farm Magazine

NOVEMBER 1918 5¢ A COPY

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What Your Boy is Doing "Over There"—By George Martin

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December 1, 1918

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LA CROSSE TRACTOR COMPANY
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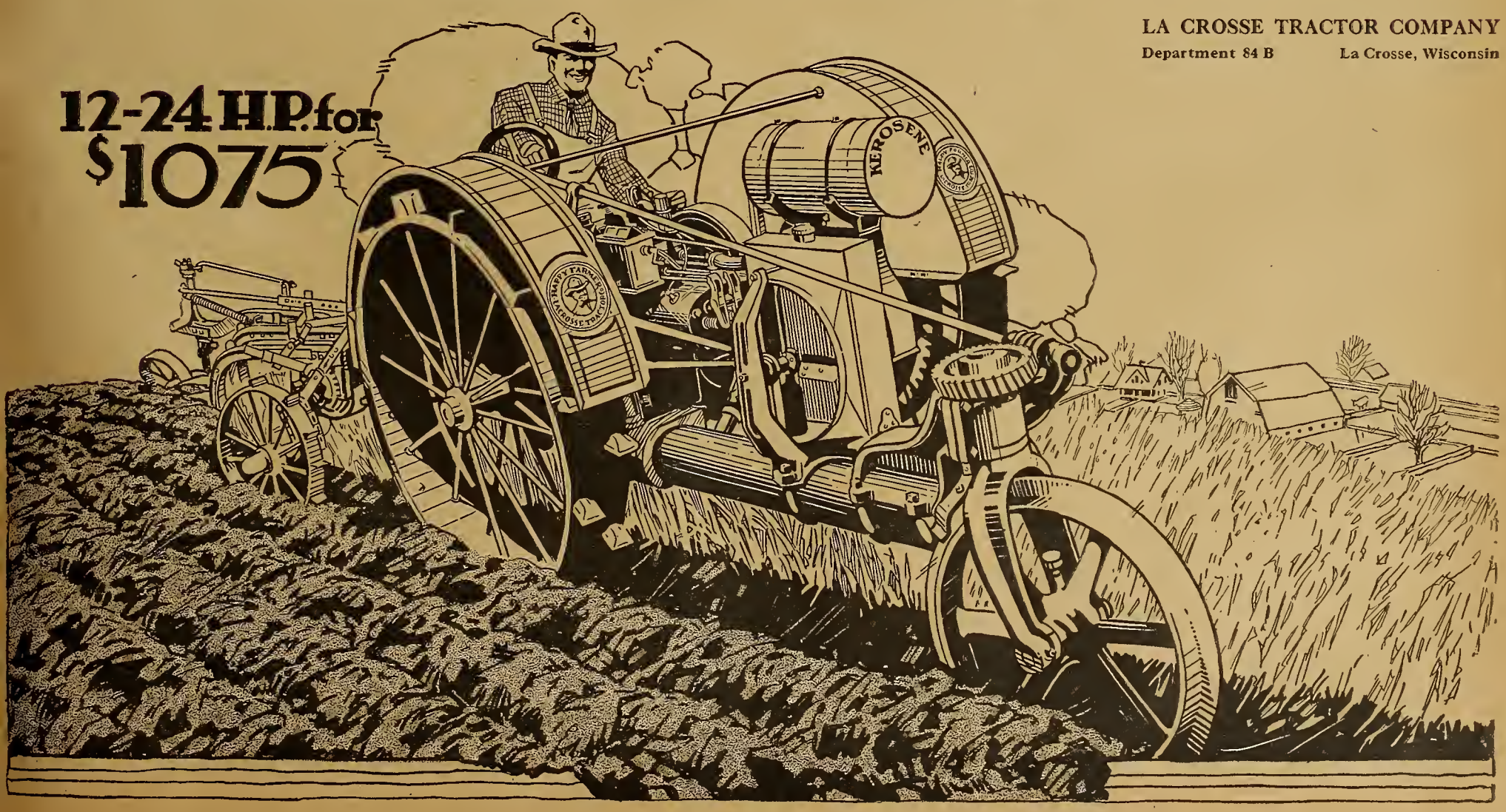

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Save laundry bills—save collar expense—have a clean collar always. Figure your average collar costs—the life of the average collar—the cost of frequent laundering. Then compare the result with

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Published Monthly by
The Crowell Publishing Company
George D. Buckley, *President*
Lee W. Maxwell, *First Vice President*
Thomas H. Beck, *Second Vice President*
Albert E. Winger, *Treasurer*
L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Harry M. Ziegler, *Managing Editor*
B. F. W. Thorpe, H. H. Haynes, Helen L. Crawford, *Associate Editors*
Alden Peirson, *Art Editor*

Editorial and Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at Post Office at Springfield, Ohio, as second-class matter, under Act of March 3, 1879.

By subscription, 25 cents a year; three years, 60 cents; or five years, $1.00. Single copies, 5 cents.

Volume 42 NOVEMBER, 1918 Number 11

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The Army—a School for Specialists

By Edwin Balmer

CONANT, the president of the Conant Adding Machine Company, was his own buyer; so Griscom, the salesman who supplied him with sheet metal, was in the president's office when Conant's secretary entered to remind him:

"Gregg and Mowry are going now, sir."

Conant looked up quickly and laid down the sample he had in his hand.

"Oh, yes; send them right in. You'll excuse me, Griscom; the draft's taking two more men out of my shops this morning—two of my best assemblers. It's hard luck. Not that I grudge them to the army, but—"

"I know," Griscom nodded, turning about as the door opened again and two young men came in. He stood up as Conant arose and shook hands with a loyally cheerful:

"Going, boys? Well, the best of luck. The Conant Company is proud of you, and wants to keep in touch and know everything you're doing. We're back of you, and you're back on our payroll when you return. . . . That's good. Yes, write to me, both of you. Now, good luck!"

Conant, with Griscom following, went out to the door to swell the last cheer from the force as the drafted men went to the car that was to take them to the train for camp. The president returned to his office a little flushed and breathless, and therefore unfit, for a few minutes, to calculate sheet-steel qualities.

"I'm glad to give those boys, Griscom. You mustn't suppose I'm thinking just about my little business when I seemed to grudge them," Conant panted. "I couldn't help thinking—it's too bad about them."

"You mean their being killed or wounded?"

"No. That's only a chance, I know, with the odds all in favor of their coming through unscratched. I was thinking of their coming through all right, and what they'll be afterward."

"What do you think they'll be?" Griscom asked.

"I don't think; I know," Conant said, leaning a little nearer. "I'm going to put 'em back on the payroll when they return; but I'm not holding any illusions about their value to me after the war. I can remember almost back to the Civil War myself: my father was in business after the war, and I've heard enough from him to know what heroes are after the war—they're no good, Griscom; no good!"

"Why not?"

"They'll forget how to work; they'll be a year or two years or more soldiering—standing idle at guard duty a lot of the time, that means; hanging around barracks or waiting in the trenches, with occasional short spasms of intense, intoxicating activity; then that'll be over and they'll be doing nothing again. Do you think they'll be able to take up real work again, eight hours a day, six days a week?"

Will Punish More Work

"WORK! You bet I do! They'll punish so much more work, and punish it so much more easily, that you'll want to fire everyone who hasn't been in the army. Hang it all, Mr. Conant,"—the salesman stood up in his excitement—"we business men make me tired. The biggest blow-ups and failures in all our war preparations have been due to business men falling down on performance. And we still talk—for of course I'm one of them—as if the alteration of our methods which the war is bringing about is going to wreck everything, whereas it simply is showing us up!

"I'm finding out. I'm calling upon government plants as well as private plants, and I know something of what the army is doing. And, since you've mentioned those two men who just left your shops to be ruined by the Government, I'll tell you exactly what's going to happen to them: They're going to come back to this plant better workmen than ever before, as hundreds and hundreds of thousands of other men like them—millions, if the war goes on long enough—will return to their work to make America the most able and efficent nation on the globe."

Conant flushed redder, as a man flushes when an oft repeated statement of his—which he had a sneaking suspicion might be a bluff—is called.

"Sit down, Griscom. Let me have it."

"All right. First, since you've mentioned the problem of returned soldiers after the Civil War, let me recall that the decades following that war were not only the years in which we built our Western railways and opened up all the West, and doubled and redoubled our mileage in the East, but were generally the years of most tremendous industrial development."

"Due to the work of returned soldiers?"

"Partly, though I do not deny that the conditions of war fifty years ago did actually give us a problem of 'returned soldiers.' I mention the tremendous activities that followed in the North as proof of the accelerated energies of the whole people who have been organized for war and who have not been defeated—energies that we are only beginning to use. We're going to give the returned soldier a very different part in the play of those energies, for they'll be a very different sort of soldiers. . . ."

Now, let us follow, not Griscom's prophecy regarding Gregg and Mowry, but the men themselves. And what is true of them is true of men in every walk of life who go into the army, whether from the country or the city.

They arrived at camp, where one of the first men they met—and the most important one to them, to you, and to the country, I may say—was the personnel officer.

There was no such an institution as a personnel officer in our Civil War; there wasn't one in either army in the Franco-Prussian War, nor in our Spanish War, nor in the Boer War, nor the Japanese-Russian War, nor in any army in this war until the United States came in. We invented personnel officers in this way:

Last year, when the War Department set about the tremendous business of raising the first million for fighting in Europe, one of the first great decisions was that promotion of officers by seniority must cease. The War Department determined that the leaders of the new army were to be selected and promoted by merit. The difficulty was how to determine relative merit between untried men.

Foreign armies either possessed no satisfactory scheme for promotion by merit—except as a reward for conspicuous service on the field—or else employed schemes incompetent to meet the American emergency. The War Department discovered, however, that at that time several large American companies already were co-operating in attacking a similar problem of selection and promotion of employees, which was, in effect, the problem of learning what is in a man before trying him out.

What's in Men's Heads

THESE American firms, thirty in number, had established in the Carnegie Institute of Technology at Pittsburgh what they termed the Bureau of Salesmanship Research, as their first interest had been in the selection of salesmen. Dr. Walter Dill Scott, formerly professor of psychology at Northwestern University, was the head of this work, which was the application of scientific, psychological tests to the examination of employees.

The whole project was still experimental; but already it had won such conspicuous successes that the War Department summoned Scott to Washington, where, after conference, the Adjutant General created a Committee on Classification of Personnel in the army, with Dr. Scott as chairman, and set the committee to work upon a system of selection and promotion of officers by merit.

They worked out the "rating scale" for officers, which the Adjutant General tried out in eight of the original officers' training camps with such success that thereafter the rating scale went into effect in all officers' training camps and personal work, with a rating scale for enlisted men also.

It was extended to all infantry divisions of the National Guard, the Regular and the National Army; then to coast artillery, quartermaster and signal corps, and tank corps; and now personnel officers are assigned to all army organizations, examining and testing every enlisted man and all officers of the lower ranks, and rating each one according to his skill and ability. For, in this tremendous extension, the personnel work has gone beyond the mere testing of candidates for commissions, and has developed into the far greater work of rating every man called into the army.

The American Army, therefore, instead of stamping out all individual development and disregarding personal proficiency at peace tasks, is actually utilizing these to the fullest extent possible. It is making the greatest organized attempt in all the world's history to foster and develop individual and specialized attainment, and to increase the number of skilled men.

It is so new and enormous that it is necessary to follow such individuals as Gregg and Mowry to get a clear idea of a part of the system.

They had been working for Conant as machinists; their task was to assemble—that is, to fit, fasten, and complete adding machines. The Conant Company is not large; its manufacturing methods are ordinary—neither very good nor very [CONTINUED ON PAGE 38]

Can You Answer These Questions in Forty Seconds?

THIS is one of the Woodworth and Wells tests, well known to psychologists, which is similar to, and gives you some idea of, tests used by the U. S. Government to ascertain the mental fitness of its army recruits. At examination it seems foolishly simple. However, see how accurately you can complete this test—without rehearsal—in the perfectly adequate time of forty seconds, which is two seconds' allowance for each of these self-evident processes. See how many ordinary individuals in any group can complete the test correctly in one minute. It at least requires clear thinking:

Cross out the smallest dot: • • •

Put a comma between these two letters: G H

How many ears has a cat?

Make a line across this line: |

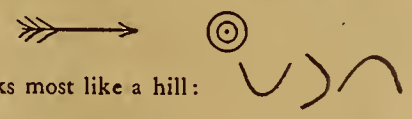
Show by a cross which costs more: a hat or an orange.

Write 8 at the thinnest part of this line: ——

Write any word of three letters.

Put a dot in one of the white squares:

Cross out the word you know best: fish, brol, matzig.

Leave this just as it is: 

Mark the line that looks most like a hill:

How many t's are there in twist?

Dot the line that has no dot over it:

Write o after the largest number: 3 86 12

Mark the name of a large city: London, painter.

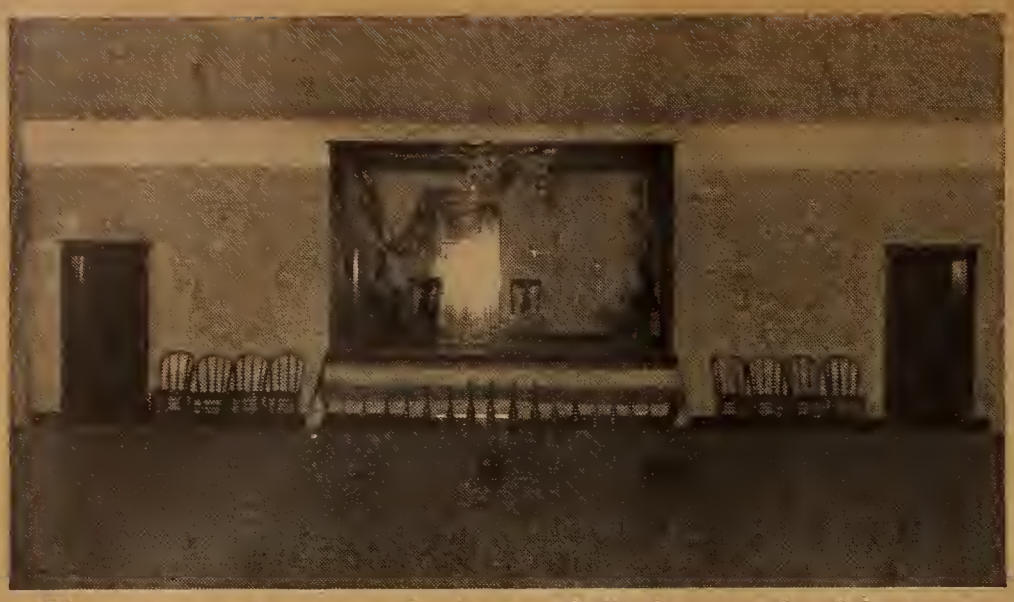
Make a letter Z out of this: 7

Join these two lines: —— ——

Write s in the middle square:

Write any number smaller than 10.

Put a question mark after this sentence



The gymnasium serves as the banquet hall whenever the club gives a dinner

Shows, lectures, and other entertainments fill the auditorium to capacity during the fall and winter months

Where Town and Country Meet

Folks from homes in fields and cities like this fifty-fifty community house—a combination club and theater where health, happiness, and friendship abound

By R. P. Crawford

WHEN a Nebraskan thinks of the town of Elgin he calls to mind not butter prices, as do the residents of Illinois, but a live community organization which serves as headquarters for all the activities of that town and surrounding country. This club's own building houses what is generally acknowledged to be the finest auditorium in any town of less than 3,000 population in the State—reading-room, gymnasium and banquet hall, ladies' rest-rooms, a lobby, and a billiard-room.

The club stands sponsor for practically all the social and community affairs. A paid commissioner is employed who devotes all of his time to the business of the organization, and an interesting fact is that the membership of the club is just about equally divided between the business men of the town and the farmers of the county.

To the business men this organization is a commercial club, to the boys and girls a Y. M. C. A. and a Y. W. C. A., to the people of the town a theater and center of all social activities, while to the farmer it does away with having to talk over the sugar barrel whenever he and his wife come to town. His wife may go to the club and rest while farmer-husband goes about his business in the town. And in the evening there may be a show in the auditorium or a reception or social meeting up-stairs. And yet Elgin, it must be remembered, is a town in northeast Nebraska with a population of only 900.

Were one to search for the very beginning of this community development he might find it taking shape in the head of George Coupland, long a resident of Antelope County and for years prominent in Nebraska affairs. He had offered to give money toward the project whenever the people in the town and surrounding country would take it up. Then another figure came on the scene—Rev. Karl W. G. Hiller, pastor of the Methodist Church of Elgin. He was calculated to furnish a good part of the enthusiasm for the project, and kept on talking the community organization until people began to think of it as a reality. These two men were far-sighted enough to see the benefits which such association would bring.

The club was promoted along two separate lines. First, there is the corporation responsible for the building and the financing of the project, and then there is the social organization composed of the members. The Elgin Community Club was incorporated for $25,000, about twenty-five residents of the town and surrounding country becoming stockholders and subscribing enough money to put the project on its feet.

Elgin already had a theater building, and this was taken over by the club. The interior of the theater was torn out and rebuilt from cellar to garret, and when the building was opened the merits of the club hardly needed further introduction to the people of the town and adjacent country. The basement of the theater had been transformed into a bowling and billiard room; the first floor into a lobby, ladies' rest-room, and auditorium; the second floor into a reading and social room, directors' room, combined gymnasium and banquet hall, kitchen, and shower baths and dressing-room. The gymnasium also serves for dances.

The next step was to make the club of real service to the community. Like any other town of its size, Elgin had a multiplicity of town organizations of one sort and another, a village band, a playground association, lecture circles, farmers' institutes, besides occasional shows that visited the town. All of these have now been placed under the sheltering wing of the Community Club. The lecture and Chautauqua courses have been absorbed by the club, and are now managed in a sound financial way, while the village band has been developed from a loose to a responsible organization. The club materially assists the farmers' institutes, making them a part of its work.

All Local Organizations Use the Club

SUCH organizations as the village board, school board, firemen's association, cemetery association, and the like, meet at the clubhouse. At intervals there are dinners and social meetings at which things of interest to the community are discussed. Here is where good roads, university extension work, community problems, and agricultural demonstrations are taken up with the people of the town and the surrounding country.

At these meetings the pastors of the various churches, the town officials, and members of the school faculty are invited to be present. In short, this club does for this Nebraska community what the commercial club does for the big city. Its activities are on a much smaller scale than those of its bigger city brother, but, on the other hand, they are much more diversified, and it would be hard indeed to start any new project without enlisting the co-operation and organized effort which the club affords.

The commissioner of the club, W. C. Nye, fulfills the same duties to the community as does the secretary of a commercial club to the bigger city. He has the general oversight of building and grounds as well as the business of the organization in furthering the interests of the town and the surrounding country. The club as a social and boosting organization is subordinate to the club as a corporation, and in that way its finances are safeguarded. The idea of financial soundness is bound to appeal to prospective members, especially the older and more conservative inhabitants.

The woman is welcomed quite as much as the man. In the statement of qualifications for membership it is interesting to note that the word "male" does not appear. In fact, the scope of the club's activities includes the work of women as well as men. The women hold their club and social meetings in their own rooms in the Community Club building.

This plan of a meeting place and rest-rooms for women cannot be too highly emphasized. Any person who has ever been in a small town on a Saturday afternoon can appreciate what it must mean to farm women who have been shopping and are loaded with bundles to be able to get off the hard pavement and into a place of this kind.

The finances of the club are to a large extent taken care of through membership fees. A family membership costs a man $15 a year, which means that he and all the members of his family have the privileges of the club. Membership for a single man costs $12. Then there are various classes of memberships for girls, boys, and women costing up to $5 a year. At the present time the club has 12 individual memberships, which, of course, means that the aggregate members run upward to 300, taking families into consideration.

Perhaps the biggest feature in the successful financing of the project is the fact that the club owns the only theater in the town, the one in its own building. The club not only has a censorship over all the shows given in the town, but gets a substantial income to aid in the paying of expenses. According to the contracts which companies sign with the community theater, any show may be called off if it is objectionable to the morals of the community. The auditorium is perhaps the finest in a town of the size of Elgin in the Middle West.

The board of directors representing the club's stockholders are responsible for the financial conduct of the undertaking. There is not, however, any effort to make the stock pay dividends, and any profits that accrue go back into the treasury to aid in furthering the club's work. This eliminates all thought of financial gain, and allows every effort to be expended toward providing real sociability and entertainment.

While all of the members enjoy this reading-room, the women have also been provided with a rest-room with large, comfortable chairs.

A Volunteer on the Way to Verdun

The place where France's soldiers coined that famous phrase "They shall not pass!" doesn't look like a fort at all

By R. B. Woolley

THE last day of our journey to Verdun dawned clear and bright. The little square at Fains and the packing of the equipment of the volunteers of Section 18 of the American Ambulance Field Service reminded me of Barnum and Bailey's circus breaking tents after a performance.

Only a few feeble old persons were there to give us God-speed. Then our cordon of little cars wound its way out through the streets of Bar-le-Duc, the largest city in the department of the Meuse.

Ever since the beginning of the first great German attack on Verdun, this city had been the objective of German aëroplane raids, although when we drove through the city most of the damage had been repaired and obliterated. On June 2, 1916, fourteen Hun planes bombarded the city. At that time the American fliers of the Lafayette Esquadrille were quartered near-by. They sent up planes to drive away the enemy. However, the raid was disastrous, there being seventy killed and more than two hundred wounded. Again on June 16th of the same year the bombers made another visit; but, owing to the stiff fight put up by the Esquadrille, were driven off.

As we rolled along the streets we observed many houses bearing white posters on which was printed the maximum number of people who could be sheltered in the bomb-proof basements. Many stores, and even some churches, bore these notices. At Bar-le-Duc it is not unusual to see numerous French *avions* in the sky. The city has been the headquarters for the flying forces of that sector. There are always a few planes on guard ready for any boche who may try a surprise bomb attack.

There is also a large number of garages. From all sections of the front damaged motor equipment finds its way to this place. For war is indeed hard on the motor car and truck. They go forth bright in new paint. Many return bearing honorable scars of war, and some are sent back in scores of pieces. But French thrift makes use of every scrap in rebuilding, and back they go.

Just outside the city we passed the last guard, a fine bewhiskered old territorial who made a brave show of saluting, then threw dignity to the wind and shouted after us a hearty "Bonne chance, mes Americaines!" That was the last we were to see of beautiful Bar-le-Duc for many months.

And now a bit about this wonderful road over which we traveled to Verdun. So prominent a part did it play in the drama of the defense of the city that the French have written it into their history as "la voie sacré," or the sacred way. To them it will always be that. I doubt not but in later years it will be turned into a grand boulevard to perpetuate the memory of those gallant defenders who died that France might live—who made good the commanding general's famous pronunciamento, "They shall not pass!"

So much has been written about the glorious and glamorous factors which contributed to the saving of the city of Verdun—the indomitable poilus who went into the trenches and stayed there; that wonderful gun, the *soixante quinze;* the marvelous generalship of those popular heroes of the day, Castelnau, Petain, and Neville—that it comes as rather a shock of surprise to learn that, no less than either of these, the "sacred way" was the backbone of the defense.

Personally, I am of the opinion that all these factors shared alike in equal measure toward keeping the city for France; but, after seeing the workings of the system that supplied the 250,000 and more defenders with munitions, reinforcements, and supplies, I am a staunch admirer of the French motor transport. Until you have traveled that road as we traveled it, day and night for months, and seen the continual stream of convoys coming and going, almost without end, you are in no position to say, "Verdun was saved thus and so!"

We rolled along over the hard, smooth surface through a section of country that reminded me strongly of certain counties in Kentucky. As I journeyed, getting great eyesful of the landscape to right and left, certain gossip that I had heard about the French organization at Verdun being by no means perfected came to mind. I remembered that no attempt had been made by the historians to conceal the difficulties facing the defenders. I remember reading about the lack of transportation facilities, the poor rail connections, and the like. All this emphasized to me how triumphantly the French had surmounted the obstacles.

Now, in reviewing the story of the conflict, it is interesting to note that splendid report of the French General Staff. It shows how they had provided against the emergency and lack of proper railway lines to the city by inaugurating an admirable system of motor transport. And the entire armies, struggling to hold what was originally the entrenched camp of Verdun, never failed for supplies or reinforcements, simply because the very highway over which we traveled was in those earlier days covered with a never-ending stream of motor trucks.

All through our trips out from Paris I had marveled how a nation which had all its fighting men at the front could still find the human beings necessary so thoroughly to cultivate every last inch of good soil.

One sees the answer to my question everywhere in France—in the bent figures of old women and children and in the painstaking, plodding, gnarled old men too busy to straighten up as we go by. That explains how France has done what she has—by using every last ounce of strength in young and old alike. That is the spirit of France which asks nothing and gives all for the beloved country. There you have the answer to the poilu's decree: "So long as the people back home are with us, believe in us, and do their part, France can never lose."

French reinforcements, munitions, and materials being hurried up to the defense of Verdun, over the famous "sacred road"

All along this road were signs marking the way. Now and then a little *chemin,* or lane, branched off the main highway and wandered up into the hills to lose itself amid the trees. Once I saw a mounted trooper silhouetted against the skyline, sitting like a knight of old. It brought to mind thoughts of the Maid of Orleans, of Jeanne d'Arc, and of ancient warriors garbed in shining armor who perhaps fought in those very fields in bygone days. What would they say of these American crusaders in the cause of righteousness and France?

As we got nearer the fortified area, signs of warfare multiplied on every side. Uniforms became more plentiful, the profusion of colors more dazzling to the eyes. Gangs of road repair men paused in their toil to watch us pass. Most of these workers were old men—some of them even grandfathers. At one place we came upon what I thought were Chinamen. Later I learned that they were Annamites, or yellow troops from the French colonies far across the seas.

Down a little crossroad came a squad of poilus, arms swinging to the step that is duplicated by no other soldier on earth. Their long horizon-blue coats were buttoned back, steel hats worn shiny from usage topping bushy faces, each figure bent under 40 pounds or more of equipment slung over his shoulder and hanging on his back in an odd-shaped bundle.

All of us who had filled our canteens with the ubiquitous French *pinard,* or red wine, took good long pulls at it. For the hardest thing to find in France is water. Water there is for the motors, but not a drop to drink for the chauffeurs—that is, not of a sort *on which* you are willing to take a chance. Though I had been inoculated with millions of typhoid germs, I felt the safe course was to follow the example of the French and stick to *pinard,* which is about as strong as our hard cider.

Another shrill whistle call from far down the line, our Marechal de Logis waving his arms like a windmill, and we were off again. It was a pretty sight to look back from my position as No. 5 in the convoy. As we rounded a hill and crawled along the side of a little valley I could see the column of battleship gray cars strung out along the road at the regulation intervals of 150 feet. Our chief was busy hustling up and down the line in Lieutenant Blanchey's Renault, prodding up the stragglers, holding back the too eager ones, and maintaining discipline. Some cars, of course, behaved better than others on the hills. Nevertheless, so well managed was the expedition that, although the trip was covered at a very slow pace and at times was interfered with by traffic, not one car got out of touch with the convoy.

I had always imagined that Verdun was a fort, or at most a small chain of forts. I was brought up to look at fortresses from the viewpoint of the pictures of Revolutionary times, the illustrations in G. A. Henty's books, in Coffin's History of the Civil War; but, like a great many other ante-bellum mental images of warfare, this belief was shattered when we got along toward Verdun. At the village of Souilly the enlightenment began.

The only thing I remember about Souilly is that here in February, 1916, the French General Staff, headed by Castelnau, Petain, and Neville—and the immortal Joffre,—directed the defense. To-day, Souilly is still headquarters for regiments of poilus *en ropos.*

And here began the real fortified area of Verdun. From here to the city the motorist passes through a fortified sector the like of which was never seen. Every hill is a fortress in itself. Barbed wire rises and falls with the ground, stretching off into the distance as far as the eye can see. Gun emplacements abound on every hand, although most of them are invisible from the road, so cleverly *camouflaged* are they. Blockades of pointed stakes interwoven with wire are at hand ready to be swung across the road. You can imagine those hills tunneled for big guns and housing whole regiments of troops; you can conjure up wicked-looking naval gun batteries out of every clump of woods.

Just beyond the hills, and huddled against a clump of foliage, are the great aviation hangars. They are grouped three to five hangars to a squadron. Out in front on the sward a row of bright aëroplanes rested like giant beetles. Suddenly a huge Caudron plane droned overhead like a huge bee, dropping suddenly down out of the blue and gliding down back of the trees. The sound of several other motors could be heard far overhead. But it was impossible to watch the road and the clouds.

By the side of the road, narrow-guage railroads kept pace with us. Occasionally, in a cutting, we saw a miniature locomotive wheezing ahead of minature box cars packed with munitions. We were held up at one crossing while a baby gasoline locomotive panted by. The name plate of the maker showed that it came from Kenosha, Wisconsin. You never can get very far from the old U. S. A. in France these days!

On every hand was action, activity, industry. Smartly dressed officers of many nationalities whisked by in their racing cars, piloted by grim-looking Frenchmen who were darned stingy with their horns. We would hear behind a short staccato "ar-r-r-r" and have just time enough to yank our car to the side of the road when they would shoot by like a bullet, leaving us cursing in a cloud of dust. What if we were ordered to keep clear to the right—it was impossible with so many interesting things to see.

In the distance the muttered rumblings of the gun, now and then punctuated by a deeper, more sullen boom, was heard. Somehow, it seemed to me like a gigantic theatre, the scenes constantly [CONTINUED ON PAGE 18]

$550 + a Farmer's Idea = $100,000

No country community needs to countenance indifferent service at the crossroads store nowadays. These Puget Sound men have proved that conclusively

By Bertha Snow Adams

AT THE head of the dock in a prosperous rural community located on Puget Sound, 20 miles from Tacoma, there is to be seen a small, unpretentious wooden building bearing this legend: "The Joe's Bay Trading Company."

More than eight years ago half a dozen of the leading spirits of the little village on Joe's Bay, christened Home by its founders, worked up a get-together meeting for the purpose of discussing things in general, and the high cost of being a farmer in particular.

For some time there had been more or less dissatisfaction with the crossroads store. The result was the formation of a company to undertake the regulation of neighborhood supply and demand on a co-operative basis. Everybody of good standing in the town and its suburbs was regarded as an asset, and urged to become a member of the organization, the only requirement being the deposit of one fourth the price of a share of stock, par value $100.

With twelve members, most of them none too sure of the wisdom of the venture, and not one of them owning a fully paid-up share, The Joe's Bay Trading Company opened its doors to the public, having handed over $50 of the small amount subscribed as the first installment on the purchase of the unpretentious wooden building, and made its début in the commercial world with less than $550 in the exchequer.

To the modern and up-to-date business man, used to conducting things on a large scale, this amount of capital must seem small, but everything was on a cash basis, and the stock was turned over often enough so there was never much money tied up in any one thing for any length of time.

For a while it was up-hill going. Folks were afraid to put their money into the new concern because of the old one already well established—there wasn't trade enough to support two stores, they said. But by the end of the first six months the untiring zeal and all-round efficiency of the young farmer who had been selected as clerk and general manager began to bear fruit. Sales gradually mounted from below $500 a month to around $1,200, and the end of the year showed a volume of business approximating $18,000.

Instead of buying flour and feed two tons at a time, as they had done at the start, they were now getting it in five and ten ton lots; and the growth was proportionate along most other lines. Canned products were bought by the case instead of the can, while flour and sugar were also bought in large quantities, all of which insured cheaper prices.

So rapidly did things move, when once they got well under way, that the close of the first year also found the new co-operative company in a position to declare a three-per-cent dividend; and this, perhaps more than anything else could have done, gained them the confidence of the community at large, and gave them the impetus that has kept them going at an ever-quickening pace. Persons living in rural communities, outside of a venturesome few, are inclined to withhold their money and patronage until a thing has proved itself to be a sound proposition.

One finds it hard to believe that a little country store, virtually in the tall timber—for less than a mile away the virgin forest surrounds Home on all sides, save along the bay front—could competently take care of the amount of business now flowing through this rural emporium. The 2x4 salesroom of early days has expanded into one of ampler dimensions, and the inconvenient loft which did duty as a storeroom has been superseded by a commodious warehouse.

The membership, too, has played no small part in the growing process. From twelve somewhat skeptical stockholders, with partly-paid-for certificates, it has jumped to twenty-nine coolly confident ones, twenty-six of whom own paid-up shares. The company is incorporated for $3,000 at the present; but as there is only one share to be had and about ten desirable citizens reaching for it with eager hands, it is at this writing taking steps to re-incorporate for $5,000.

Against an average of $1,500 a month, as shown by the records of the first half of the second year, the books for 1915 show a monthly average of a trifle more than $4,000; those of 1916 raise it to approximately $6,500, and the report handed in at the semi-annual meeting of the corporation, held July 13th, states that during the first half of the current year business totaled close to $48,000, an average of $8,000 a month.

You would never guess it, but there's a $100,000 idea in this building, which is making twelve men rich

The prospects are that by the end of 1918 the $100,000 mark will have been reached—the thing seeming hardly credible when it is remembered that the working capital is less than $3,000, but the books are there to prove it, which all goes to show how a community will pull for an idea after it has been once convinced that it will make and save them money.

A Butter-and-Egg Country

THE principal industry of Home and its immediate vicinity is poultry-raising on a considerable scale, and dairying in a small way; consequently there are many eggs to sell and much feed to buy—in fact, these two items constitute the major part of the business transacted by the co-operative store. Monday is spoken of as Egg Day throughout the locality. Then from far and near come the farmers or their wives—some in automobiles, some in creaking wagons, some trundling wheelbarrows, some carrying pails or baskets, and all bringing in eggs to be shipped the next morning to the neighboring cities of Seattle or Tacoma, according to market conditions.

During the week of March 17th, 351 cases of eggs were shipped out; as they were then selling for 34 cents a dozen this in itself was a tidy bit of business. And when you consider that these are strictly fresh eggs, the kind that are in great demand on all city markets, there is always a ready sale for the product.

The feed bill for June reached the grand total of $5,451.80. This was some bill for a little country store to owe, but it didn't embarrass The Joe's Bay Trading Company a bit—they had the wherewithal to meet it. Everything that the farmer has to buy, as well as everything he has to sell, is handled for him by the store, and that it pays to co-operate is proved by the fact that in 1917 a dividend of 9.71 per cent was declared, it being voted to pay stockholders 5 per cent in cash and set aside the remainder as a sinking fund.

While members only are eligible for cash dividends, whosoever will may share in the benefits of wholesale prices, plus an additional 5 per cent to cover running expenses, by dealing with the co-operative company. When asked to give some idea of how much the farmers of the section actually profited by co-operative buying and selling, the alert young store manager looked perplexed.

"That's a hard question to answer," he admitted, "because saving money a few cents here and a few cents there isn't easy to keep track of, and farmers are notoriously bad bookkeepers. But maybe an illustration or two will drive home the point. Take eggs and chicken feed—they're the two biggest items to most of the folk around here. We handle eggs for 30 cents a case. That covers our expense of packing, handling and shipping, and any other cost that their movement may incur. This charge is very reasonable, for it allows the producer a good price for his product without the commission he would have to pay to the middleman.

"Right now I'm paying everybody who deals with us 33 cents a dozen, while at a privately owned store five miles from here they're paying only 29 cents. At present I'm selling chicken feed for 17 cents less than they're asking. About half-way between the two stores there's a man with a 1,000 hens. He uses close to half a ton of wheat a week, and just now he's getting four cases of eggs in the same time. By bringing his eggs to us he made $4.80 more than he would if he'd taken them to the other store; and by getting his feed from us he made or saved—it amounts to the same thing—$1.36. Add to that the $4.80 he made on his eggs, and you'll see that by dealing with he us was exactly $6.16 ahead of the game.

"Of course, the profits aren't so marked along all lines, but the fact that most of the farmers within a radius of 10 miles are now trading here proves that it's big enough to pay them for the trouble of coming so far when there are other stores a lot nearer. The three biggest poultrymen in Vaughn, a town seven miles from here, are members of this store, and it's the same way at Glen Cove, Blanchard, Longbranch, and other nearby villages.

"For several years now I've had to have a helper in the store all the time. The store has been open every day. At first it was closed on Tuesdays and Wednesdays, the days that I was in the city, but the business grew so fast that that arrangement wasn't kept up long. Two years ago we bought an automobile truck, and it has turned out to be a mighty paying investment for us, and a great accommodation to the community at large.

"We operate on a margin of 5 per cent and the difference between that and the 35 to 33⅓ per cent made by the private concern is turned over to the stockholders. We're entirely free from debt, and in spite of the high cost of everything profits pile up. At our semi-annual meeting in July there was a surplus of $743 and a few cents, but it was decided not to declare a dividend. We may need the money in the business this fall.

"Co-operative buying and selling is the best thing in the world for the farmer, but it is often hard to convince him," the manager declared emphatically.

"There is no reason why what we are doing cannot be duplicated by any rural community that's wide awake. All that is required is a little money, someone with a workable knowledge of business principles to look after things, and a whole lot of the get-together spirit."

After the War of '76

By C. E. Davis

WE HEAR some complaint of conditions resulting from the war. But before complaining just read this letter written by Mrs. Abigail Adams, wife of the second President, on June 8, 1779:

"I have been able to supply my own family sparingly, but at a price that would astonish you. Corn is sold for $4 per bushel. Labor is $8 per day, and in three weeks it will be at $12. Goods of all kinds are at such a price that I hardly dare mention it. Linens are sold at $20 a yard; the most ordinary calico at $30 and $40; broadcloths at 40 pounds ($200) per yard; molasses at $20 per gallon; sugar $4 per pound; Bohea tea at $40; meat at 6 and 8 shillings ($1.20 to $1.60) per pound; board at $60 per week!"

And yet these pioneers, with full confidence in God and these United States, worked hard, utilized every bit of homegrown produce, and were content to live plainly. The glorious plenty of after years justified their faith. We can look back to these influential progenitors of our present mighty nation and learn a lesson of patriotic living to nerve us to do our part uncomplainingly.

What Your Boy is Doing "Over There"

He takes pep and the determination to win with him, and the spirit of France keeps his ideals high

By George Martin

"OH, MY GOODNESS," said a Nebraska farmer's wife to me the other day, "I do hope my boy won't come home from France with a lot of bad habits and wrong ideas! I hope this army life won't make him a brute! It is such a terrible life!"

Her tone was rather hopeless, as though she considered it a foregone conclusion that this would happen to her son. I asked her why she felt so.

"Well," she replied, "look what the Civil War did. It made more drunkards than it freed slaves. It brutalized men's minds and sent them home moral wrecks. Not in every case, of course, but history shows that, generally speaking, war is the ruination of young men."

But not this war. It isn't the actual fighting that brutalizes a man if he is fighting on principles for a just cause. It is the camp follower and the booze and the idle hours off duty with nowhere to go and nothing to do that ruin men in war. And those things have been eliminated from America's share in this war. And there are other things which would prevent the sway of them, even if they were allowed.

Another mother had heard the story of a British Tommy returned from the trenches who, on being frustrated in his attempt to sleep by the noise of women and children in the court below, went to the window and told them to shut up and go away. Either they didn't hear him or they didn't heed him, and, enraged, he seized a bomb lying on his knapsack and hurled it down in their midst, killing three of them.

Would her boy be like that? No! That poor fellow was insane, crazed by the grind of battle as some men are. His condition, unfortunately, did not develop sufficiently to be discovered before he was granted seven days' leave. Also, there is a dependable system now for determining beforehand whether a man will lose his mind in battle, and such types are kept at home.

The first mother's feelings have been pretty generally chorused in the United States, and there have been worried days and sleepless nights in farm homes and city dwellings since the boys have gone over there. But the feeling is gradually dying out, and FARM AND FIRESIDE aims with this article to hasten the killing of it.

The record thus far shows that the American boy's experience as a soldier on the allied fronts is having just the opposite effect. Authorities at home and abroad realized that certain things about the Civil War and the Spanish-American War had a demoralizing effect on the men, and from the beginning of our share in this war they have effectively stamped them out. Men who had been good for nothing show by their letters that they are becoming good for something in France, and men who were set in the right paths when they started show they are being broadened and deepened and seasoned to a nobler temper by the white fires or this war.

I know a young chap who started life on a Midwestern farm some thirty-odd years ago. He got in with the barber shop and livery stable gang in the nearby town, learned to drink and to gamble, and to do all manner of things that nearly broke his mother's heart. He roamed the country from end to end, living by his wits, leaving a stream of debts everywhere for his father to pay. Twice he narrowly escaped going to the penitentiary. Innumerable times his people got him out of jail, where he landed as a result of some debauch or petty offense. He deserted the wife and child his parents didn't even know he had until they heard from them. Until he entered the army this man had done about everything he could to disgrace and demean himself. He had no consideration for anyone but himself, and no aim in life but to have a "good time."

For a year and a half that man hasn't touched a drop of liquor. His separation allowance is taking care of his family. He is strong, robust, cheerful, earnest, and deeply interested in his job in France. He has a real object in life. He wants to help whip Germany, and he's doing it. In a letter to his brother a few days ago he wrote:

"It is a sad and sorrowful sight here, and we are only on the edge. The country is farmed by women, children, and old men. In town to-day we saw no young or middle-aged men except those with the marks of battle on them, without arms, without legs, without eyes, or maybe without all of them. It sure gets a man's goat to march down a street and have women dressed in black wave their hands at you and smile, with lips that quiver and eyes streaming tears. Bub, it makes a man study his hole card awful close, but they have all the nerve in the world and all hell cannot keep them from winning.

"They look to us to deliver, and I can say we are doing it. I am in the game, and I want to keep busy. Am feeling good and want to stay that way."

Certainly, here was a man who, if the influence of what America's boys are doing over there were morally bad, would be the first to succumb. But either the influence is not bad, or something has kept him from it. What?

I think there are several very clear answers to that question. Foremost, I think, is the sight of a land in ruins—brave France. There is nothing in the country, nor in the heart-broken people who inhabit it, to encourage a man to spend his time at anything but helping them wipe out the havoc that engulfs them. The spirit of all the letters I have seen from France is of great, if unspoken, pity. You read it between the lines. It makes itself evident in the contrasted tone of their letters before they went over and now that they're there. This same man wrote, just before he left, an offhand, happy-go-lucky letter clearly indicating that he enlisted purely in a spirit of adventure. Among other things, he said:

"When people ask me why I enlisted, I tell 'em I'm an an honest-to-God man and don't have to be dragged. The truth is, I want a ringside seat at this scrap."

The Feel of the War at Its Heart

THERE is nothing like that in his letters from France. He's got the "feel" of this war at its heart, and it has made a new man of him, just as it's making new men of thousands of others.

How could it be otherwise when your boy goes over there and sees with his own eyes and hears with his own ears what has happened? Put yourself in the place of the little farmer's wife I am going to tell you about. Imagine, while you read the words of this man from the front, that the war were in this country, that the Huns had invaded Canada and swept south across the United States as they have swept through Belgium and northern France:

"One day in Flanders I saw a fragile girl, not more than twenty years old, seated by the roadside distractedly crooning over a little wan babe. She started to run at my approach, but was too weak—human nature was exhausted. I spoke to her kindly, telling her not to be afraid. She replied in quaint Walloon French:

"'Sir, I have learned to be afraid of all men, but I must speak. Please give me food for my baby; he is starving. He has had nothing to eat for two days except a little milk that a poor woman gave him yesterday. I have had so little to eat for the last month that I can't feed him.'

"I took her in my car to find a place of refuge, and on the journey she told me her story. Not a strange story in that land these days, but typical of thousands just like it which tell of pillaged farms and villages of that country and the blasted lives of those happy little families of the soil who dwelt on them before the coming of the Hun.

"'We were very happy, Henri and I,' she said. 'We had our little farm, all paid for, our fruit orchard, two cows and plenty of chickens. We worked hard and were saving a bit for the baby that was to come. Then war broke out, and Henri joined the army. I was left alone. One day some German soldiers rode up and an officer gruffly asked me where my husband was. I told him he was where he belonged—fighting for his country. When I said that one of his men knocked me down with a gun. You see this scar over my eye—that is where he hit me. I suppose they thought I was dead, for they left me lying on the ground. When I came to, my pretty little house was gone—burned up. The cowshed was all that was left, and I had to live in it. My baby was born in a cow stall, like the Babe of Bethlehem. The neighbors helped me all they could, but they had very little for themselves. I got along somehow until last Saturday, when some rough German soldiers came and wanted me to go with them. I escaped with my baby, and have hidden in the woods for two days without a mouthful of food. It does not matter about me, but my baby must have something to eat.'

"'And your husband?'

"'He is dead.'"

This same man, a well-to-do American farmer who had been to France before the war, told of revisiting what was once a beautiful little farm village in Picardy.

"In happier days," said he, "I had frequently gone there to enjoy its quiet peace and restfulness. It seemed to be directly transplanted from Arcady, for nothing disturbed its calm serenity where it lay in the heart of the pretty farms which carpeted the gently rolling hills that hemmed it in. Its people were hospitable and kind, as people who live by the land usually are. The whole place was an object lesson to a hurrying world filled with greed.

"I dreaded to see the expected change, but I was not prepared for the horrors that awaited me. I expected change, and found destruction. Not a single building was intact. The little thatch-roofed cottages were gone, the familiar little inn was not there. The village church had been destroyed, and while looking over the sacred spot I saw some torn and weather-beaten pictures lying on the ground. They were part of the 'Way of the Cross' which had once adorned the church walls within whose shadows I had attended service many a time. These shreds were all that identified it as having been the house of God.

"Where there had been little French maidens walking the village streets, there were no streets and no maids to walk them. At first I thought there was not a living soul in the place, but suddenly I saw coming out of a battered cellar the remnants of what had been a man, now a pitiful derelict amid the ruins. His hair and beard were snow-white and growing in wild luxuriance. His eyes shone with a strange light, his shirt was tattered, and his shoes full of holes. I spoke to him, but he showed no sign of recognition, saying:

"'Away! Leave me alone! Why do you linger here? Why are you not fighting for France?'

"I recognized his voice. It was the jolly little innkeeper with whom I had stopped on many occasions. I asked for Suzanne, pretty little black-eyed Suzanne, who once waited on his guests so gracefully.

"'The Germans.'

"'And your wife?'

"'She fought to protect Suzanne. They killed her.'"

There are these things without number. They are the ghastly commonplaces of France. The knowledge of them is one thing that will make your boy fight hard and keep him upright and strong and clean.

Then there is the Y. M. C. A. We hear a great deal about this organization and kindred bodies, such as the Knights of [CONTINUED ON PAGE 16]

Although the Y huts have to be some distance back of the front, here is a Y canteen 150 yards from the Hun lines

The "Wild-and-Woolly's" Fruit

Although the cowboy is becoming a curiosity, and the buffalo a domestic animal, there will ever be an orchard-covered "No Man's Land"

By Frank A. Waugh

A scene in the Grand River Valley, Colorado, showing many orchards in various stages of growth

FRANKLY, every man is proud of his own experiences, and I may as well confess that those years I spent on the great American frontier seem to me to have been filled with useful observations. It was then the real frontier—"the jumping-off place," my mother used to call it. Nobody had ever farmed that land before, not even the Indians. Our few neighbors had all come within a few months from lands farther east. The farming was all a dark experiment.

But the settlers were home-makers. All had come to stay. And so they tried to supply themselves with the necessities and some of the luxuries of home. They made gardens, and nearly all of them planted orchards. The greater part of them sent "Back East" to Illinois or Ohio for trees of their favorite varieties, such as Rambo, McAfee's Nonesuch, Huntsman's Favorite, Romanstem, Smith's Cider, White Winter Pearmain, not omitting Baldwin, Spy, and Greening.

These trees, received after many vicissitudes and delays, were planted and cultivated after the farm methods dimly remembered, for it must be taken into account that none of these immigrants on the prairies were bred to fruit-growing. Even the Swedes and the Germans, who were quite abundant among the pioneers in those frontier days, had come from dairy districts or grain-growing lands.

Under such conditions it is not surprising that fruit-growing on the raw prairies of Kansas and Nebraska didn't meet a highly qualified success. Indeed, the only wonder is that, with failures so frequent and complete, anyone should have carried it through to reasonable success. But those pioneers were cheerful losers. They lived through drought and mocked at grasshoppers. What to them was the loss of a dozen apple trees more or less?

Improvements came with time. It was presently discovered that, instead of planting orchards on the hilltops, as people used to do back East, the prairie farm would fare better with its apple trees in a protected ravine where there were less wind and more moisture. It was discovered, too, that less drastic pruning would suit better with a climate that was nearly all sunshine and very little rainfall.

Then came the introduction of the Missouri Pippin and the Ben Davis. What a revolution that was! For old Ben especially could stand the punishment of a climate made for Kafir corn and not for apples. I witnessed his early triumphs on the plains, and to this day it grieves me to hear anyone make fun of Ben Davis.

In Iowa this history of the early days in apple-growing included another chapter. Indeed, this chapetr has a wide application—much wider than the borders of Iowa. The incidents in question were those connected with the introduction and testing of the Russian apples. The Russian apple episode was a picturesque and lively one in the annals of American pomology.

This history is now so far forgotten, yet is of such present significance in modern practice, that it will bear a word of review. Various experimental importations of Russian apples were made, notably by the Massachusetts Horticultural Society in 1835, the United States Department of Agriculture in 1870, and by Charles H. Gibb of Canada and Professor J. L. Budd of Iowa in 1882. Professor Budd, then an energetic and influential public character, became the propagandist in chief for the Russian fruits, propagating and distributing them far and wide up and down the prairie frontier. His propaganda was so urgent that it naturally developed an opposition, so that for several years the Russian fruits were almost a political issue.

Taken as a whole, this experience did much for the frontier orchards. It helped to break down the old traditions and to open the way for fresh experiments. It brought all varieties and all practices to the local test, and through this test the best was certain to survive. Since that day many thorough-going experiments have been conducted, much practical experience has accumulated, and the Plains States have developed a pomology of their own.

Yet it is still a frontier pomology, and always will be; for somewhere through Minnesota, northwestern Iowa, South Dakota, Nebraska, and Kansas there runs a line, by no means imaginary, beyond which apples do not grow. Or if they do it is only by exception to prove a substantial rule. As we approach that limiting line, orchards dwindle in size and grow wider and wider apart, trees live under increasing burdens, and only through refined and specialized practices can crops be brought to harvest.

Peach tree broken down by poor heading and overloading, after having been weakened by freezing

It has grown to be a theory of American thinking that the frontier has disappeared. In the old social and economic sense certainly it no longer exists, but we jump too far to shaky conclusions when we think that all frontier conditions have been obliterated with the fast disappearance of the cowboy and the practical extinction of the buffalo.

Frontiers That Can't Be Wiped Out

LET us put the case another way: Pomological frontiers can never be wholly wiped out, and can be pushed back only very slowly. There will always be geographical limits on fruit-growing, and most of these will be decisive. For example, we in Massachusetts are tenants of the northern frontier in peach-growing. Only by courtesy can we count ourselves in the peach belt. Forever must we content ourselves to gamble with a hostile climate and take our winnings with our losings. And to meet these unfavorable conditions we must adopt our share of frontier practices. There is likewise a northern frontier on orange-growing, and a southern limit on apple-growing; and there are northern and southern limits on grape-growing. The principle which needs to be pointed out is this: that as we approach these frontiers we meet increasing handicaps and our fruit-growing must be conducted with special precautions. Frontier fruit-growing is a permanent institution over wide areas.

It will be seen at once that these fruit frontiers are fixed by certain limiting physical factors. Now, the theory of limiting factors has come to be a fundamental principle in all agriculture. The modern scientific farmer simply determines what is the limiting factor in each case, and then makes his principle attack at that point. In this frontier fruit-growing the limiting factors are usually easy to determine. The northern limit of peach culture, at least in New England, is marked by the minimum winter temperature. A minimum temperature of 20-25 degrees below zero is followed seven months later by no peaches. Probably the western limit for apple-growing on the plains is marked by a certain minimum rainfall. In the Northwest a combination of minimum temperature and minimum rainfall would give us a double limiting factor. It would be more difficult to point out the definite limitations which mark the southern frontier for apple-growing or for other fruits; but they exist just as positively. It is only because less attention has been given to this matter that we have less precise knowledge.

It is clear therefore that the methods which have to be adopted in frontier fruit-growing will be highly specialized, and will be usually determined by the character of the limiting factors. In our patriotic endeavor to grow peaches farther north than the Lord meant to have them grow, we must avoid the worst winter temperatures. We do this mainly by planting on high land, where efficient air drainage carries off the coldest of the cold air. As we approach the apple limit on the Western plains we find it good practice to plant our apple orchards, not at the top of a hill, but in a well-protected low land where the amount of moisture is above the average.

In almost all cases it will be necessary further to adopt special cultural practices. On the Western plains everything must be done which will conserve moisture. In trying to get our peaches through the dangerous winters it is always necessary to see that the wood is well grown and ripened.

Certainly one of the most important points in dealing with frontier conditions lies in the selection of hardy varieties. The introduction of peaches of the North China type, such as Champion and Greensboro, has done more than any one thing to make peach-growing practicable in our naturally unfavorable section. The introduction of the Russian apples certainly helped to carry apple culture farther north and west. The adoption of the hardy native plums into cultivation has pushed the plum frontier north and west by hundreds of miles.

Fruit-growing on a commercial scale should not be pushed too far to the frontiers. There are too many drawbacks, too many disadvantages as compared with more favorable locations farther back.

Like all other generalizations, this one is subject to minor exceptions. For example, the man who finds a particularly favorable location, well toward the frontier, can often make up in an advantageous market the small handicap which he suffers in the work of growing his product.

Picking pears with the aid of patented ladders and canvas picking bags

Marketing—the Farmer's Biggest Problem

Whether a feeder makes or loses money depends a great deal on his knowledge of the market classes of live stock

By Thomas J. Delohery

"I WAS here to-day with cattle and hogs. Don't put the sale in the paper, for I do not want the farmers at home to know what I got for the stuff. They know too much now, for those market papers give them the information, so that they want the earth and the sky for their stock."

This little speech has been handed me many times by shippers who market their stock at the Chicago stockyards. They buy the stock from the producer in the country, sometimes $1.50 to $2 a hundred under the market prices, after figuring on the cost of commission and railroad charges. They market the stuff when they get a carload, and seldom lose money, for the price they buy at will take care of a generous decline in prices.

This makes a knowledge of market classes of live stock, coupled with market reports, almost a necessity to the farmer who does not market his own stock, or who does not produce a carload at a time. Without knowledge of what certain kinds of hogs are bringing on the market, the stockman is at a disadvantage when selling to a shipper. The shipper buys as low as he can, and in order to keep the producer in the dark does not want him to know what the stock brought.

"It is not what we produce, but what we get for it, that tells us if our busimess is profitable," said one farmer in discussing the market situation with me.

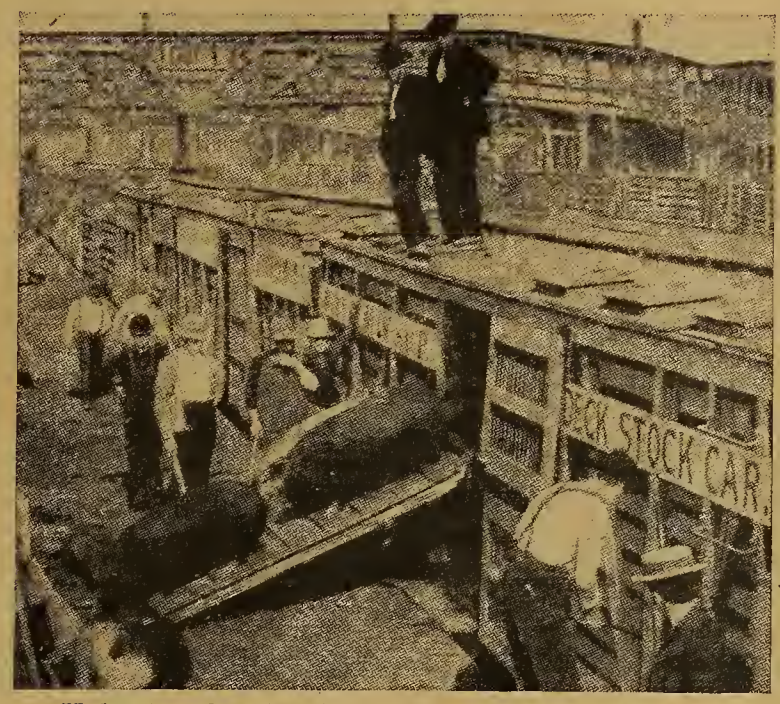
Marketing is the greatest problem of the farmer. He may raise the best of produce, but if he cannot get the best price he is a loser. Marketing of live stock is as important as feeding; one cannot get along without the other.

A shipment of steers, on arriving at the yards, may be termed as choice by a commission merchant. He demands a price that this class of stock is bringing. The buyer may make a bid, such as is being paid for good steers. Experts differ on the opinion of cattle below prime and choice. Prime cattle cannot be disputed, and choice are just a shade below the best kind.

Therefore it is obvious why a farmer should know how his cattle, hogs and sheep will grade on the market. Thus on looking up the market reports, he can tell about what his stock will bring on the market, and demand the right price from the country buyer. Many of the patrons of every market are men who do not raise any live stock, but who buy stock in small lots here and there in the country.

I am on the Chicago live stock market nearly every day, and know what the shippers do, how various kinds of stock grade, and what requirements are necessary for an animal to grade prime, choice, good, medium, or poor. In this article I will describe the make-up of an animal in each of these classes for cattle, hogs, and sheep.

Prime steers are the best grade produced, both in quality and condition. They are well developed across the loin; have straight lines, thick rump, twist, and thighs; are deep, broad, and free from a big paunch. The head is medium size, and the neck short and thick, blending on to well-covered shoulders. The chest is wide and deep, and the bones of the animal are neat and trim, being of medium size. The hair is smooth and glossy, and the skin of medium thickness and pliable. The fat is spread evenly over the whole body, with extra thickness along the back and side. The flesh is mellow, not flabby or hard.



Unloading butcher hogs from a double-decker in the Union Stockyards at Chicago

Choice steers grade second best, and for the most part comprise nearly all of the corn-fed steers coming to Chicago. It takes in a greater part of the short-fed stuff that has been warmed up on corn. The difference between this and the prime class is that the steers may lack the quality or condition, or both, of the prime steer. The choice steer may be a bit rough and at the same time carry good quality.

The Story of Half-Fat Steers

MOST half-fat steers are sold in the "good" class. These steers usually are not fed long enough, or have been made on grass, with a month or two of light corn feeding. They lack finish, and the quality is not so very good. Steers of this kind are usually made from very cheap feeders or stockers, and in most instances are profitable to the feeder in that it costs little to fatten them. A good steer is plain, not very fat, with heavy bone, poor conformation, and lacking quality. In other words, it is a half-done steer.

Medium steers are about half-fat, and lack the finish required in a prime steer. They carry heavy paunches when fed and watered, and when dressed do not show the well-marbled beef of the prime carcass.

The lowest grade of beef cattle is common or poor steers. They are used largely for canning purposes. Steers having quality but lacking any flesh would go into this class were it not for the stocker and feeder trade.

Heifers are graded like steers—prime, choice, good, medium, and common. However, outside of the prime and choice heifers the live-stock man does not deal in them. Any heifer that is well fed and taken care of will generally land in the prime or choice class. Two or three or more prime heifers mixed in with a load of cattle will demand just as good prices as the steers. Prime and choice heifers to demand such prices must correspond in condition and quality with the steers.

Baby beef includes steers and heifers weighing up to 1,000 pounds, generally being less than a year old. The best weight to sell these calves is about 900 pounds. Heifers, however, sell best when averaging approximately 800 pounds. The requirements are the same as steers, although calves may not possess the finish of older stock and still demand a good price. The demand for this sort of stuff is increasing every year, and well-finished calves in good condition will bring as much as prime heavy cattle.

Butcher stock consists of bulls, cows, stags, and thin heifers. The grades are the same as for steers; but since the feeder does not go into producing butcher stock, it being the residue of breeding herds and dairies, there is no need to tell the qualifications of the various grades.

There are three grades of hogs—butcher, packing, and shipping. A butcher hog is one that weighs from 180 to 350 pounds, that can be used for retail trade. A large proportion of the fresh pork sold in retail markets is pork loins, and these come from butcher hogs. The best weight for a butcher hog is from 200 to 300 pounds. To yield loins of proper size and quality these hogs should be smooth and of good quality. The flesh should be thick, firm, and solid, and the skin soft, with a liberal covering of fat.

The grades are heavy, medium, and light. To grade as prime butchers, either heavy, medium or light, the hogs must be of good quality and be in good condition. There must be an appearance of ripeness and correct form, resulting from constant grain feeding.

The heavy butcher carcasses are known as heavy loin hogs, and the lighter weights as light loin. The prime butcher hog must have a smooth back, heavy hams, filled out even at the sides, full at the rump, and well rounded down toward the hocks, without wrinkles or flabbiness. The shoulders must be smooth, the neck short and full, and the skin thick and firm but not wrinkled.

Packing hogs are of a poorer class than the butcher hogs, being made up of old sows and other hogs carrying much weight but lacking in the quality so vital to a butcher hog. A packing hog will weigh from 200 to 500 pounds, and grade as heavy, medium, and mixed. About one half of the hogs handled at Chicago go into the packing class. Defects common in packing carcasses are thick, rough and wrinkled skin, dark-colored and coarse-grained flesh, soft, oil fat, large bones, and bruises. They are more largely cut into short ribs and mess pork. The cuts from the medium packing hogs, averaging from 200 to 240 pounds, are dry-salt sides, mess pork, clear backs, bellies, loins, short-cut hams, and picnic shoulders.

Shipping hogs are about like butcher hogs, being of the same weight and commanding [CONTINUED ON PAGE 25]

Steers sell under five classes—prime, choice, good, medium, and poor. Prime steers like these bring the highest market price

FARM AND FIRESIDE

The National Farm Magazine

Founded 1877

Published Monthly by

The Crowell Publishing Company

Springfield, Ohio

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By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

NOVEMBER 1918

We Are All Wise Men

EVERY man can teach every other man something. No matter how old-fashioned the farmer, there is something in his experience that would be new to the most modern and advanced county agent. Hence, let this be a plea for tolerance. Tolerance by the farmer of the county agent's ideas and tolerance by the county agent of the farmer's ideas. They'll both gain something thereby.

The county agent, the teacher of agriculture, or any other specialist who goes into a community and finds a certain farm method in general use will be slow, if he is wise, in condemning that method. It may seem contrary to accepted teachings, he may know methods that he would substitute for it, but if it has persisted for any length of time the chances are that sound reasons exist for it.

Students of agriculture who have traced the farm practices followed by the Israelites of the Old Testament and by other ancient peoples have concluded that those practices were best for the time and place in which they were employed. The same conclusion has been reached as to more modern methods. The type of farming that survives and prevails at a certain period and in a certain region is, generally speaking, the type that is best for that period and that region.

The fact of the matter is that the farmer would hardly have survived at all, through the ages of recorded and unrecorded history, without a high degree of judgment. There are so many things to be taken into consideration in successful farming that no simple, always workable formula will suffice. Only those nations and those individuals that have been able to build up a sound type of farming, based on all the factors involved in agriculture, have survived as agricultural nations and practical individual farmers.

To-day, as in the past, the farmer must have sound judgment. There is room for much improvement in farming everywhere, but no agricultural section is going all wrong in its methods. The wise observer recognizes always that the farmer has sense.

War and Clean Living

TO WORK hard and live clean seems to some men a too Spartan discipline. They look longingly toward the goal of "taking things easy," and some of them are sometimes not too careful of their private lives. But though the discipline be Spartan, it pays—particularly in times of war, as the following interesting paragraphs will show:

One night in the front-line trenches in France, with the murderous shells flying over his head, an American marine sat down to write his father a birthday letter. He was a genuine, fun-loving, whole-souled, typical American boy, just like hundreds of thousands of his kind; a wee bit careless and thoughtless at times, perhaps, but honest, sincere, brave, tender and true. Here is the letter he wrote:

MY DEAR FATHER: I just wanted to write you a letter on your birthday. I don't know when I will be able to mail it, but will take a chance anyway.

I want to thank you as your son. You have always been to me the best father a man could wish. I want to thank you for the gift of a clean, strong, and vigorous body that can serve America in her need. Most of all I want to thank you for the long years of self-denial that made my education possible, for the guidance and teaching that kept me straight through the days of my youth, for the counsel ever freely given when asked, and for all the noble things in your example.

I surely hope that you will celebrate many more birthdays, and that I will be home for the next one. Also, may the coming years bring to you wider fields of service and honor, strength to perform your work, and in the end peace, contentment, and quiet rest.

Your son, a soldier of the United States, salutes you, with love and devotion.

The boy who wrote that letter was killed on the field of battle before the letter reached his father. To-day it is his father's dearest heritage, rivalled only by the memory of a good boy who died nobly for his country.

How many fathers there are to-day, all over this broad land, who seem to be taking no physical part in the war themselves, yet to whom the nation and the whole world owes an unpayable debt for the gift of "a clean, strong, and vigorous body that can serve America in her present need."

They lived good, upright, honorable lives, and in the stalwart bodies of their sons they have given "their" utmost that the world may go free through unnumbered ages to come. How many a boy—soldier and civilian—can look upon his father, or back upon his memory, and, with uncovered head, say with the poet:

I thank Thee, Lord, that I am straight and strong,
With wit to work and hope to keep me brave.

The war is paying many debts, teaching many lessons. None is greater than this: The gift of a clean, strong, and vigorous body is not surpassed by great riches; civilization may be preserved because many men have led good lives and left their imprint upon their sons and their sons' sons.

The War Must Not Be Late

TO KEEP the war on time, other things have got to be late. If the American attack at Chateau-Thierry had been delayed forty-eight hours longer, the Hun might now hold Paris and the Allies face defeat. It was delay in the peace-time affairs of America that enabled us to throw those men in and turn the tide just at the right moment.

Magazine delivery is one of the things we sometimes have to delay nowadays to keep the war on time. Soldiers and munitions first in transportation; then magazines and other things. So if your copy is late now and then, just smile and say to it:

"Well, old FARM AND FIRESIDE, you're a little off schedule this month, but the boys got to the front on time with plenty of fighting material, so it's all right."

Know Your Neighbor?

WHEN you are called on to attend a meeting or serve on a committee somewhere, especially if the object be patriotic or for the good of the community, don't decline. Go. The world is getting acquainted these days, and you don't want to be left outside. You can't afford to be left outside.

The war has brought people together. Since the United States entered the war, there probably have been twice as many meetings in rural communities as during any previous period of the same length. Meetings have been held to discuss the reasons for our going to war, to promote the sale of Liberty bonds and other war securities, and to instill in young and old the fundamental principles of democracy.

People have formed the habit of attending community meetings. They shouldn't be allowed to get out of the habit. These meetings have been found pleasant, and at the same time of benefit to the community. They have created a spirit of community interest, community loyalty, community pride.

This spirit should be utilized. There will continue to be meetings for specific war purposes, for the winning of the war is now America's big enterprise. But simply because there is no specific war proposition that requires a meeting this week or next is no reason why a meeting should not be held. Why not have a meeting to talk over the needs of the community, another meeting to talk over the school situation, another at which letters will be read from soldiers who have gone out from the community?

Then some purely social meetings are worth while. An old-fashioned spelling match, a community "sing," or an indoor picnic with a program by the boys and girls of the vicinity, will do much to promote neighborliness and community interest. The people of the community should form a real unit throughout the war, and they will continue to form one after the war is over.

Pictures You Do Not See

DON'T turn up your nose at the farm, with its fields and woods and hills and valleys. Don't you know that the woods and open country are the home of all art and all literature, and that all great cities are modeled after the country?

Don't you know that the stained-glass window of the church in town is merely a copy of a bit of beautiful sky through an oval break in the branches of a tree; that all architecture is merely a copy of nature; that the arched entrance of a great building is but an imitation of the natural arch of an avenue of trees? Note the decorations in stone on great buildings: what are they? Leaves, branches, twigs, flowers. All cities are imitations of the real thing, and the real thing belongs to us in the country.

When a professional photographer or an amateur photographer of some experience wants some particularly attractive views, nine times out of ten he drives out into the country. He recognizes that pictorial beauty is chiefly rural rather than urban.

In the midst of this beauty it is surprising that more of us who live in the country do not own cameras. Photography is an all-the-year-round recreation. The newly plowed up prairie, the field of shocked wheat, the rocky creek flowing between snow-covered banks—these and many other scenes invite the owner of a camera. Then there are pictures to be made of the babies, summer picnics, winter evenings indoors with the family gathered about the table.

A person, too, is likely to find the camera useful in a business way, as well as interesting. Photographs often go farther than descriptions in selling pure-bred live stock, fancy fruit, and many other farm products.

A modern camera is simple to operate; even if one does all the work on his pictures, from making the exposure to mounting the finished print.

The cost of materials, especially if one does the developing and printing himself, is less than in almost any other recreation affording the same amount of pleasure. Any member of the family or, better, all the members of the family may take pictures. The camera aids in making the home a continual center of interest and enjoyment.

Teamwork Does the Job

AS FARMERS, there are a great many things that we cannot successfully "put over" unless we do teamwork. We cannot grow pure-bred seed corn if our neighbor just over the fence plants another kind. We cannot well escape hog cholera, even though we keep our lots clean, when a neighbor a little further up the creek fails to burn the carcasses of his hogs when they die of cholera, unless we vaccinate our hogs.

The brush thicket on a neighbor's farm may prove a hiding place for wolves that prey upon sheep on other farms. Flies coming from one filthy home in the community may spread typhoid to homes a mile or more distant.

Purchases and sales are best made when we join with our neighbors. Community breeding of live stock pays. Neighborhood improvements come through co-operation.

A telephone system with but one subscriber would not be worth much, even though the switchboard and other equipment might be the best that money could buy. The rural telephone system, with its convenient "central," ought to teach us a lesson in getting together and working to gether.

Of all the lessons that the war has taught us none is greater than that of teamwork. It is a day of "drives." Men mass for action. Yes, and the soldier learns to keep step before he goes into battle. As farmers, can we not learn as much?

Avoid Grain Waste

WITH the corn harvest either finished or nearly completed, and our barns well filled, there is a tendency to feel rather well satisfied with the year's crops. This feeling, however, begets carelessness, and no person is truly patriotic who allows a single bushel of grain to go to waste. Think six months ahead, when the stock will have to be fed from the supply which has been stored.

Now is an excellent time to put the bins and cribs in first-class condition, enlarging them if necessary, or remodeling the barn to give more storage room. Never since the time of Pharoah has the world needed food so urgently. The old method of making a corncrib by putting netting around posts is wasteful with corn selling at present prices. Build better and bigger, for a critical winter in the history of the world is approaching.

Constable Rudd

In which Karnak's inhabitants demonstrate the infective power of humor, and the town loafer suddenly develops a startling amount of self-confidence

By Octavus Roy Cohen

SHORTLY after the opening of the polls for Karnak's local election the town humorist stepped from the voting booth. He was chuckling softly:

"Guess what I done?"

"What?"

"Voted for Ernie Rudd f'r constable!"

A roar of laughter greeted his statement; a veritable upheaval of mirth through which were interspersed remarks: "G'wan! Jim, yuh didn't, really?" "Betcha kiddin' us!" "Why, he ain't got a chancst!"

It was this last remark which the town humorist answered—answered with the contempt which a man of wit reserves for him in whose mind the practicalities of life are ever uppermost.

"Course he ain't gotta chancst. D'yuh s'pose I'd of voted f'r him if he had a chancst to be 'lected?"

Two other legal possessors of the ballot hastened to learn the cause of the laughter. They were speedily informed:

"Jim's cuttin' up his monkey-tricks again. He voted f'r Ernie Rudd f'r town constable!"

"Aw-haw! You, Jim! You're always bein' funny, ain't yuh?" Whereupon these good men and true entered and duly cast their votes for Ernie Rudd for town constable. Meanwhile the humorist journeyed to Simpson's Drug and General Hardware store and convulsed the loungers with a recountal of his latest humorous exploit. It seemed to get funnier with each telling. Even Charley White, the present incumbent and sole official candidate on the municipal ticket, roared over the idea and hurled a sally at the stoop-shouldered rat-faced little man who was slouching down the unpaved road which was Karnak's main street—sending up little puffs of gray dust with each step:

"Hullo, Constable!"

The little man turned watery eyes on the bestarred man who had addressed him. He fidgeted nervously, unerringly scenting another baiting by the idle townsmen.

"Whut's that?"

"I said, 'Hullo, Constable!'"

"Whut about it?"

It was quite evident to him that the remark was very funny, for the dozen men—voters all—put hands to shaking sides and shouted with glee.

"Listen to 'im: 'Whut about it!' Ain't it a scream?"

The ferret eyes of the little man narrowed to the merest slits.

"Whut's th' idee? You fellers think you're terrible smart."

A big man, a man of deep chest and broad shoulders, of lowering brow and evil visage, detached himself from the curbing on the other side of the street and sauntered idly toward the group about Ernie Rudd. He was smiling in a cruelly amused manner. He shouldered his way into the group and paused, hands on hips and eyes resting balefully on the little fellow. Rudd moistened his lips nervously at sight of Dan Rabens. He had always been the particular prey of the town bad man's ill humor.

"What's all th' fuss?" questioned Rabens darkly, apparently ill pleased that others should have trespassed on his pet preserves. Bystanders hastened to enlighten him. He laughed throatily.

"Ain't it rich? By Jingo! I'm gonna vote for 'im my own self. Come along, fellers!"

He marked his ballot in sight of all, and swaggered into the booth. When he returned he clapped Ernie Rudd heavily on the shoulder.

"Hurray f'r th' new constable! Charley," eying the present minion of Karnak's law, "you ain't got a chancst against this bird."

Charley White grinned.

"Course I ain't. I'm allers ready t' step out in favor of a better feller."

The thing was a great joke, a sort of communizing of wit, and Karnak gathered it affectionately to its corporate heart. Karnak boasts few jokes of its own: it is too drab a place to afford a fertile field for humor. The townsfolk, from the mustached intendant to the portly and elderly female who operated the hotel, joined the procession to Simpson's, where Rabens lifted Rudd bodily and placed him on an overturned packing case.

"Ye're runnin' f'r constable, Ernie. Give us a speech!"

The little man was frightened. Too often he had been the butt of the town's humor, and this thing had assumed proportions which bade fair to become unpleasant for him. He sought to escape.

"I ain't runnin' f'r no constable. You fellers lemme alone!"

"Give us a speech!" Dan Rabens sidled menacingly closer and glared into the little man's restless eyes. "A speech, y' hear? Ain't y' got no gratitood f'r our votes?"

"Speech!" howled the crowd. "Speech! *Spee-eech!*"

"Fellers, honest, I ain't wantin' to—"

"They want a speech," growled Rabens. "You give it!"

Ernie Rudd gazed helplessly about. More than a score of men were clustered around the packing case now, broad grins creasing their grimy faces. Better to make the best of a bad bargain. He opened his mouth and closed it again like a fish; then a few words choked from lips:

"Much 'bliged, of course. 'Lect me an' I'll make a good constable. Course Charley White, yonder, is a good man, but—but— Say, fellers, that's all I can think of. Honest, it is!"

"Three cheers!" roared Rabens, "Three cheers f'r our next constable! You lead 'em, Ernie. All t'gether! One—two—three!" The cheers roared out with a will, but Ernie stared from his post of vantage on the packing case, dumb. "Didja hear me, Ernie?—you cheer!"

"I cain't cheer, Dan. Honest, I cain't."

"Cheer! One—two— Dammit, whatcha mean by standin' there starin' at me?"

Ernie Rudd shrank at the other's approach.

"Now you be lettin' me alone, Dan Rabens!" he whined. "Y'r allers pickin' on me."

"You make a cheer, or—"

The spark of a cornered rat flashed into Ernie Rudd's eyes.

"I ain't gonna make no cheers, not f'r you nor no one else. An' you lemme alone!"

Raben's big fist clenched.

"You do what I say!"

"I ain't. An' you cain't make me."

"Oh! I can't, can't I?" Dan Rabens' open palm flashed out and spanked viciously against Ernie's cheek. The little fellow sprawled ignobly in the dusty road and the spectators roared with unholy glee. Rudd clambered to his feet with difficulty. He stared belligerently at Rabens.

"You cain't make me cheer," he defied.

"You'll cheer, or—"

Dan Rabens' open palm flashed out and spanked viciously against Ernie's cheek. The little fellow sprawled ignobly in the dusty road

For once in his life Ernie Rudd met a man's eyes squarely.

"Dan Rabens," he said quietly, "you can go straight to hell!"

Then he swung on his heel and strode away, the derisive laughter of the crowd in front of Simpson's ringing in his ears. Nor did the laughter cease during the day. The story was retailed to every newcomer and furnished never-failing enjoyment. At five o'clock the polls closed. At five-thirty the fifty-three votes had been counted. It was then that Karnak gasped at the infective power of humor.

Ernie Rudd had been elected constable by an overwhelming majority!

At first Karnak could not believe the evidence of its senses: Ernie Rudd, town character, constable of Karnak! The thing was inconceivable. The town humorist and Dan Rabens and Seth Standish confessed to having voted for Ernie, but every other man in the place stoutly denied it—as though by his denial he might wash his hands of all responsibility. One stark fact stared the voters in the face: of the fifty-three votes, thirty-eight had been cast for Ernie Rudd.

The town was stunned. The job of constable in Karnak carries with it no great responsibilities—it has ever been rather loose in its interpretation of the law, and in times of stress the services of the county sheriff have been enlisted, certain sections of South Carolina's code to the contrary notwithstanding. It was in the rugged strength and fearlessness of Sheriff Potter that Karnak now sought solace, since its perverted sense of humor had elected an incompetent for a two-year term.

After all, the thing was excruciatingly funny. Each voter gibed his fellow ballot holder, and in turn took a world of good-natured chaffing. And then they went down the road to notify the newly elected official.

That night Ernie Rudd refused to believe it: it was just another slant to the town's idea of a joke. He drove them petulantly from his cabin and went to bed. But he couldn't sleep. The delegation had displayed an undercurrent of seriousness, and Ernie was struck with the thought that it might be true. At that he rose and lighted his corncob pipe.

He was a poor, bedraggled figure of a man, a product of the dreary swamp which borders Karnak on the east and south; a leather-skinned, fleshless, sunken-eyed, shiftless loafer who walked with an apologetic slouch and with the light of eternal fear playing from the corners of his eyes.

He had lived in Karnak ever since he could remember, scraping a living here and there: occasionally working a few acres on shares; hiring out as driver with his spavined nag and rickety buggy to take some salesman to the stores scattered about the swamp district; accompanying parties of ambitious 'coon or deer hunters through the gray glades of the forest. This last occupation paid well, and Ernie was in demand, for his 'coon dogs were the best in Karnak County.

From a weak-kneed adolescence, through his dozen years of maturity, he had been the butt of Karnak's gross jocularity. His position was not enviable, for Karnak is narrow-souled and a bit cruel. It is a hamlet of three hundred and fifty-odd persons, a settlement of unpainted houses and stores and of coarse-grained inhabitants.

Dan Rabens had long ruled as king of the little town, kowtowing to no man save the leading attorney of the place, a man about half Rabens' size, who ruled the big man by sheer power of mental superiority. But aside from the little lawyer, Rabens feared neither man nor devil, and went a considerable distance out of his way on occasion to prove the fact. Some there were who accused Rabens of having a yellow streak, but certainly no individual had yet appeared in Karnak with sufficient hardihood to put the claim to the test.

Rabens had been the one particular wellspring of Rudd's misery. It was he who had originally singled out the little fellow as a natural target for eternal hazing, and he had bred in the breast of the smaller man an intensity of hate which fanned Rabens' natural hardness into a white heat. There was [CONTINUED ON PAGE 32]

The Mystery at Glen Cove

Jimmy is bewildered by the quick succession of stirring events which lead him and Steele breathlessly on to a new and puzzling discovery

By Howard Vincent O'Brien

FOR perhaps an hour we sat in silence by the cold remains of our motor.

"Heigho, Jimmy!" Steele said at length. "Cigarettes all gone; I guess we'd better start walking."

"Don't you think a car may come?"

He laughed.

"We've been here a good while so far and nothing's shown. We might stay all night. Hello! Hang me if that doesn't look like one now!"

I turned. Sure enough, over the brow of a distant hill I could catch a faint radiance in the sky. It vanished for a moment, and my heart sank. Then it reappeared, and we got the full glare of the oncoming headlights. The deep-throated hum of the exhaust told us that the car was coming at terrific speed.

"Will she stop?" I queried, becoming apprehensive.

"You bet she will!" was the grim response. My companion's indolence had left him. "Quick, Jimmy! Give a hand here!" As he spoke he put his broad shoulder to the wheel of the wrecked car. I caught his purpose at once. He meant to push the vehicle into the center of the road so that the oncoming car could not pass.

"But if they don't stop?" I panted, straining at the other side.

Steele grunted.

"Then they'll go right on through to a better life."

There was a resentful howl of the siren on the approaching car. The driver had apparently seen our gleaming tail-light, and was signaling that he meant to pass. Not a moment too soon did he realize that we were stationary, and he drew up with a snarl of brakes which was eloquent in its angry protest.

"One'd think you stopped us a purpose!" he bellowed. "We're in a hurry."

"Well—and suppose we did?" Steele's placid reply seemed to stun him.

"A purpose, eh?" he echoed stupidly.

"Quite so. And now, my friend, we're in a hurry too. You'll be good enough to give us a lift, won't you?" The words were not so much a request as a simple statement of fact. "See," my companion added, "it's beginning to rain."

"All of sudden her dainty little foot shot out and my unhappy head banged on a stone"

The driver seemed about to acquiesce, when he stopped as if in response to an order from the interior of the heavily curtained limousine.

He shook his head.

"Sorry, boys," he said, regretfully but firmly. "I got a full load, and they don't want no comp'ny."

"We won't bother your fares," urged Steele, strangely amiable. "Have a heart, man."

"Sorry, boss," replied the chauffeur sympathetically. "I got my orders."

"But, my dear fellow—"

"Come on, now!" The driver's tone became threatening. "Get your junk out o' there, or I'll—"

"You won't take us?"

"No."

"There was a sudden change in Steele's voice. The wheedling persuasiveness vanished, and it became hard and cold.

"Get out of that car!" he ordered incisively. I caught the gleam of polished steel in his hand. Before the dumfounded driver had time to comply, wiry fingers had seized his coat collar, and he was sprawling profanely in the road.

"Now then, Jimmy," ordered Steele, "if you and our charming friend will be good enough to remove the débris, we'll be on our way."

The poor chauffeur was too dazed to be of much assistance, but it was easier to move our car down than it had been to move it up, and I was able to accomplish the task almost unaided.

"Get in," said Steele sharply, addressing the driver, "and drive where I tell you to, or I'll blow the top of your ill-mannered head off!"

The poor wretch obediently threw in his gears, and the car leaped forward.

I had believed myself in danger with Steele in his roadster, but this was infinitely worse. The car, never designed for speed, and almost top-heavy, careened in the ruts like a cork in a bucket, and the rain, now pouring in torrents, soon made the road an almost chartless morass. The speeding wheels slid and slipped, and the ditch loomed always perilously close.

We fled through the night for what seemed an interminable period. Presently I became conscious that we were entering a village. Lights became more numerous, and the road grew firmer underneath. Then the car swerved sharply, and brought up with a creak of brakes.

"What now?" I heard Steele ask suspiciously.

"Gas," was the chauffeur's brief reply. He got out of his seat stiffly and disappeared into the darkness. In a few minutes he was back, carrying a can the contents of which he poured into the motor's tank.

He was about to resume his seat when there was a tap on one of the windows behind us, and the door opened slightly. The chauffeur put his head inside for a moment, holding a whispered consultation with the mysterious occupant. Then the door slammed, and he climbed back into the front with us.

He turned to Steele quite casually.

"The lady wants to speak to ye," he said, jerking his thumb toward the rear of the car.

"Change of heart, eh?" muttered my companion. He leaped from the car, all but losing his footing in the oily mud. "Here, Jimmy, take charge of the arsenal!" He handed me the revolver. "Keep an eye on our profane friend."

I accepted the weapon gingerly, praying fervently that the chauffeur would not make it necessary for me to use it. Fortunately, he seemed to have no such thought, as he was apparently dozing, his head resting wearily on the wheel.

The parley seemed to take an unnecessarily long time, and I strained my ears to catch something of it, without relaxing my watchfulness in front. Suddenly I caught a faint sound. My heart jumped. I heard a subdued groan, followed instantly by a soft, sloshing thud. Involuntarily I turned my head.

It was the awaited signal. I felt myself seized by the shoulders and catapulted through the air by the treacherous chauffeur. The door of the limousine slammed, and with a snarl and a roar the big car leaped away into the darkness.

When I regained my senses I was lying on a bed, and Steele, seated beside me, was thoughtfully puffing at a cigarette. He had a clumsy bandage tied around his head.

"Hello, old man!" he said cheerfully when he saw my open eyes. "Feeling better?"

"Might I asked what happened?" I inquired languidly.

Steele chuckled.

"It was beautifully done, wasn't it?"

"Before enthusing over the beauty of the proceedings, I should like to know what *was* done. What did she want you for?"

"You mean, what she wanted me to think she wanted me for?" He smiled quizzically

"I suppose so—yes."

"Well, to ask where we were going, and what we were going to do when we got there. She seemed frightened, so I soothed her, you know, in my well-known way. I got so interested that I—well, I just took a nap. It was her chance. Jimmy, it's an amazing sensation—being kicked by a maiden in distress."

"She kicked you?"

"Exactly. You see I was standing beside the car, which was near the curb. All of a sudden her dainty little foot shot out. I don't think she really meant to bang my unhappy head on a stone, but that's what happened. It dazed me for a moment, and that's all they needed for the getaway. The chauffeur chimed in at the right second, and you came shooting after me. I was scared to death, at first, that you'd cracked your silly old skull; but I looked you over pretty thoroughly, and decided you'd just gone to sleep.

"Well, I dragged you up here, gave the landlord a small legacy to keep his mouth shut, bought myself some very bad cigarettes—and here we are."

"And here we are," I echoed ironically. "Whither next—to Mars?"

"Same direction. Keep on going," he replied laconically.

"See here, Steele!" I burst out hotly, unable longer to contain myself. "I've trailed along thus far in this insane scheme without question or complaint. I've risked my life and probably injured my health irreparably. But now I demand to know where the devil we're going—provided, of course, such precious information may with safety be confided to me."

"Why, surely, old man; nothing easier." The confounded rascal smiled, and drew from his breast pocket a small notebook, bound in red leather. "Here you are. I picked this up in the Debrett garage."

I accepted it, and ran through its pages. All were blank, save the first two. On them were a number of scribbled figures, a memorandum to see "Joe 2 P. M., Thursday," another to "get toothbrush," and at the bottom, a single line, "Bryant 1846."

That he should consider this specific guidance for the future was simply the crowning madness.

"What do you make of it?" he asked.

"Of what?"

"The—that last line."

"I should say it was a telephone number," I replied with unconcealed sarcasm. [CONTINUED ON PAGE 35]

What Has Gone Before

AFTER a dinner at Admiral Debrett's home, Carter, a stranger to all present except the young débutante Agatha Burchard, is called to the telephone by the Japanese butler, Toguchi. A moment later all the lights go out. Just as they flash on again a gasping sound is heard in the telephone booth. When the guests rush in they find Carter unconscious. He has been shot. Marks on his throat show that someone has attempted to strangle him. During the excitement Marie Brandt, an attractive young widow, disappears. While examining Carter, Steele, a young bachelor, hears a machine leaving the grounds, and he and his friend Jimmy start in pursuit. But someone has put thumb tacks in Steele's tires, which cause a blow-out, leaving them stranded miles from town.

A gun that shoots a patchy pattern like the above cannot give reliable service. The birds often get through

The hard-hitting Winchester pattern is evenly distributed. It brings down every bird within its spread

Why the Model 12 is the ideal shotgun for the farm

WHEN a farmer buys a shotgun, he buys it for a double purpose; *first* to clear his farm of crop-destroying, chicken-thieving pests; *second* to provide an effective weapon for upland game birds, prairie chickens, or ducks — for where is the farmer who does not enjoy a day or two of hunting now and then?

In return for his investment, the shrewd farmer demands, and has every right to demand, a gun that will *bring down the birds every time* Plugging at a flock of crows, he must be sure of exterminating as many as come within the shot pattern. Taking a wing shot at a plover, he wants to be certain of a pattern that will land at least the three pellets necessary to a "kill" in the body of the fowl.

The gun for the purpose

Farmers who are versed in the lore of the shotgun know that there is one gun that gives them the results they want — the Winchester Model 12. Where results count, this master weapon meets every requirement.

The Winchester Model 12 is a beautiful gun, light in weight, and simple and sure to operate. Superbly balanced, it points like your own arm. It can always be relied upon to plant a *close, even pattern*, with *lots of force* behind it, at the range for which its choke adapts it. It works smoothly and surely in whatever position it is held.

There is a gauge and a bore of the Winchester Model 12 to give you just the kind of a pattern you want. Built in 12 gauge, weight 7¼ lbs.; and in 16 and 20 gauge, weight about 6 lbs. For those who prefer a hammer action gun, the Winchester Model 97 is the usual choice. Built in similar lines to the Model 12, but with hammer action.

An axiom of gun making

Men who know guns realize that the accuracy and durability of a gun depend primarily upon the barrel. To them the quality of the barrel measures the quality of the gun. With Winchester the barrel *is* the gun. For years this has been an axiom of gun building in the Winchester shops. Through the most unremitting attention to boring, finishing and testing, Winchester has developed a single standard of barrel quality which prevails in the highest and lowest priced Winchester models.

How the barrel is bored

The barrel of the Winchester Model 12 is bored to micrometer measurements for the pattern it is meant to make. The degree of choke exactly offsets the tendency of the shot to spread. Until its pattern proves up to the Winchester standard, no gun can leave the factory. The nickel steel construction preserves the original accuracy forever.

The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that, with proper care, will last a lifetime.

What (P W) means

Look for this mark on the barrel of a Winchester gun. It means that the gun has been subjected to the *Winchester Definitive Proof test*. It stamps the gun with Winchester's guarantee of quality, which has 50 years of the best gun-making reputation behind it.

Every gun that bears the name Winchester, and that is marked with the *Definitive Proof* stamp, has been fired many times for smooth action and accuracy. It has also been fired with excess loads as a test of strength. At every stage of Winchester manufacture, machine production is supplemented by human craftsmanship. *Every Winchester gun is perfected by the test and adjustment process.*

It is this care in manufacturing that has produced, in the Model 12 and Model 97, guns of unsurpassed game-getting qualities—guns that have won the name of "The Perfect Repeaters" among wild fowl hunters.

Write for details of Winchester shotguns and shells

Detailed specifications of the Model 12 and Model 97, and also our new booklet on shells will be sent on request.

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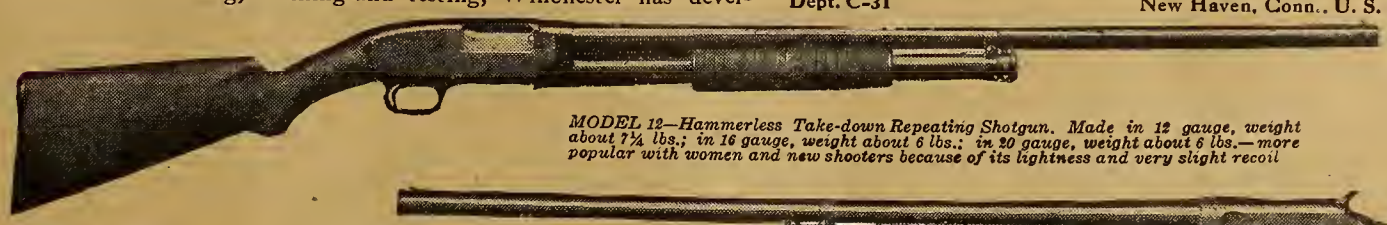
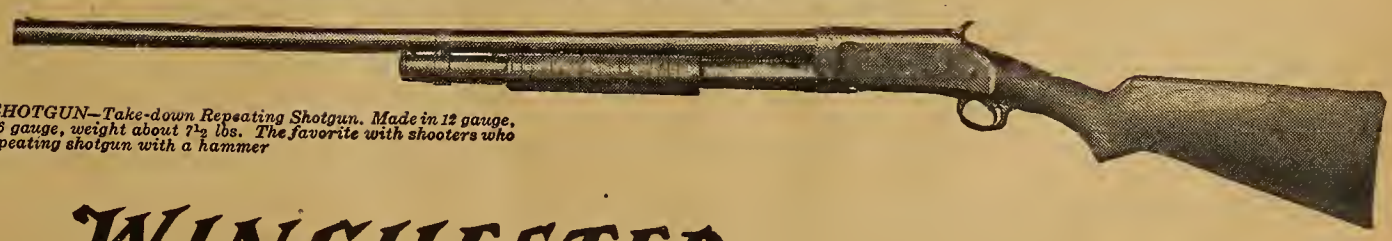


MODEL 12—Hammerless Take-down Repeating Shotgun. Made in 12 gauge, weight about 7¼ lbs.; in 16 gauge, weight about 6 lbs.; in 20 gauge, weight about 6 lbs.—more popular with women and new shooters because of its lightness and very slight recoil



MODEL 97, HAMMER SHOTGUN—Take-down Repeating Shotgun. Made in 12 gauge, weight about 7¾ lbs.; in 16 gauge, weight about 7½ lbs. The favorite with shooters who prefer a slide forearm repeating shotgun with a hammer

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The Goodyear Tire & Rubber Company
Akron, Ohio

What Your Boy is Doing "Over There"

[CONTINURD FROM PAGE 9]

Columbus and different lodges. But it is not always easy to understand just how they have direct bearing on the kind of men we send over and the kind we will get back.

To understand what the Y. M. C. A. does for your boy over there you must first understand the conditions which confront your boy when he gets there. In talking with Dr. John R. Mott, international secretary of the organization, just after his return from his last trip to the front, he said:

"When you hear that a certain company is 'billeted in a French village,' don't picture a village; picture a ruin where most of the buildings have been ground to dust and the remainder are jagged walls overlooking a labyrinth of dugouts and cellars. There is nothing in these villages to keep a boy dry when it rains, as it does most of the time in France; nor to keep him warm in winter. There is no place to go and nothing to see but desolation and destruction. The battle lands of France are a dreary waste, shell-riven and battered. Occasionally you will find in these 'villages' an *estaminet*, or what we call would a 'hole in the wall,' where cheap wine may be bought. But even these are small comfort to the soldier, for he cannot stay inside with his purchase: he must go outside; and outside there is no place to go.

"What a blessing, then, is a Y. M. C. A. hut in a place like this. And, depend upon it, there is a hut in every one of them when the boys get there. We see to that. This hut is the only place a boy can go to get dry or to get warm, to write a letter or to play a game, to buy candy or to hear a little music. Do you think these things mean nothing to a man in a place like that? They mean everything."

It happened that Dr. Mott's own son was at the front when he got there. He didn't mention it, but I knew of it and asked him about it.

"Yes," he said, "I saw him. He was just off duty from his post on one of the limbs of a high tree, watching the Germans. Every moment of the time he was under fire. I asked him how the living accommodations were. He said they were all right; fine. An officer told me later that the night before part of his company had slept in a stable from which the cows had been led out a few minutes before. Those who got a clean barn to sleep in were highly elated. Seven of the men had slept in a hen house. My boy was one of them."

But the Y hut in this land of ruin is not everything to your boy. George W. Perkins, chairman of the Finance Committee of the War Work Council of the Y. M. C. A., told me of a case which shows conclusively that the Y and similar work in France is worth what it costs a thousand times over.

"A certain company of Americans from a Middle West farming community," said he, "had just finished a tour of duty in the front-line trench. They had undergone a terrific bombardment by the enemy, and it looked as if nearly every member of the group would go to hospital suffering from shell shock. They marched into rest billets dull of eye, weary of foot, and slump-shouldered. The moment the word of command to fall out was given they scattered out around the little field, where they stood and slumped down. Most of them slept the night where they dropped.

"Next day along came a Y recreation man to cheer them up, but they refused to be cheered. Nothing interested them. He tried games, and they merely stared at him. He tried puzzles, and they handled them a minute and laid them down. The situation looked serious. Unless those men could be aroused and the stupor of the trenches driven away from them, they would be casualties for many weeks. The Y man thought it over; then, going to his small truck, he hauled out an armful of American bats and balls and tossed them on the ground in front of the men. It did the trick. In five minutes every one of those men was up, shouting and grinning and playing ball. And the Y man went on to the next job."

This was not just happenstance, but part of a broad and carefully worked-out plan of the Government to keep these boys fit in body, soul, and mind and bring them home the same way. They have not simply removed the camp-following women and the stream of whisky which flowed in the wake of our Civil War men: they have put things in their places which turn the men in the right direction without making them feel that they are being morally elevated with too much of a vengeance. They would resent that, and rightly. No man likes to feel that he is considered incapable of taking care of himself in any respect.

What General Pershing himself thinks of this side of the war came to light in an unusual way the other day when National War Work Council Headquarters of the Y. M. C. A. received a letter from Staff Headquarters. It seems that Pershing wanted to know something about the thing himself, and delegated Lieut.-Col. E. S. Wheeler to study it and give an opinion. Part of his report, included with the letter to the Y. M. C. A., contained this statement:

"There is no one factor contributing more to the morale of the American army in France than the Y. M. C. A. Its value cannot be overestimated. When they come to the Y. M. C. A. huts day after day and night after night in their spare moments, enjoying the privileges created by a corps of self-sacrificing Red Triangle workers, I know that they are better men and better fighters for so doing. Give me nine hundred men who have a Y. M. C. A., rather than a thousand who have none, and I will have better fighters every time."

appeared, he said, to see nothing, to hear nothing, and to be thinking of nothing. Their faces were blank. But he noticed that throughout the service their eyes sought a common goal, something apparently behind and beyond the priest at the altar, and when he looked he saw that their eyes were fastened on the list of dead, of men who had gone to the war from that commune, and who had made the supreme sacrifice.

The spirit of France is a river that runs deep. No man can set foot upon her shores to-day without being immersed in it. It is not confined to the fighting line, nor to the rear areas, nor to the surrounding villages. I think it was Irvin S. Cobb who said that never out of all the thousands upon thousands of American soldiers he saw march down the gangplank from ships in France did he see a single man laughing and yelling. They adapt themselves and take their tough work, laughing and joking later, but they have been taught not only to fight but why they are fighting, and to a man they approach the land of Lafayette in wonder and solemnity and earnestness, a spirit which later is not so apparent in their everyday life, but which forms an unbroken undercurrent of that life, nevertheless.

How I Fell in Love with My Wife

A GENTLEMAN once confided in us that he married his wife for her hot biscuits, and she married him to go to Niagara Falls. Strange reasons, truly; but there are stranger, and we would like to have you men readers of FARM AND FIRESIDE sit down and write us, in 500 words or less, how you fell in love with your wife. We won't give you away, but send your name and address, because we pay $15 for the best letter, $10 for the second best, and $5 for the third best. If we buy others, we pay for those too.

This is your chance to tell the real truth about a matter which is usually surrounded with more or less domestic camouflage. Later we may call on the women for their side of it, but this time we want to hear from you.

All letters must be in our hands not later than November 20th. Announcement of the winners, and their letters, will appear in the February number. We cannot return unused letters. Address Contest Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York City.

In passing, it is interesting to note that the Y. M. C. A. alone has sent the American boys fourteen hundred thousand cans of fruit, four million packages of chewing gum, four hundred million cigarettes, twenty-one million cigars, three hundred million sheets of writing paper, six million pounds of sugar, and two hundred and ten thousand pounds of candy.

Within a few weeks the Y. M. C. A., Knights of Columbus, and other organizations will open a campaign for funds with which to carry on their work overseas. The Y figures it will need at least $112,000,000 for itself. I don't know how much the others want, but whatever it is they ought to have it, and more, for they ask no more than they need, and they ought to have more than that, as emergencies are frequent.

There are still other influences working for the good of your boy over there. The soldiers of France are living examples of the desperate conflict that is going on. Their weary eyes and plodding step cry out unceasingly to them that the war is too important and the struggle too hard to do anything but live right and fight.

I talked recently with a woman whose husband is in France, on this very subject of the war's effect on the boys who go over there.

"I know," said she, "that the war is making my husband over. And he was a pretty fine chap before he went. But I can see in his letters that his experience over there is putting his feet on the ground. He is getting the proper balance between reality and ideality. The things he has seen among the French have worked wonders in him.

"One day he attended mass at a French church. He sat among the poilus in their worn uniforms of horizon-blue, a dull-eyed, almost stupid-looking little group of war-weary men who had fought literally inch by inch over the land they loved, for the great free republic they would not give up. They

Could a boy in that frame of mind go far wrong? I think not.

Just before Foch's big Franco-American counter attack at the Marne, when the marines had come up and jumped in to hold the Germans on the south bank, a strapping sea soldier, who hailed from down Kentucky mountain way, noticed a little French woman rushing frantically up and down among the troops.

"What's the matter, madam?" he asked, blocking her way with his huge bulk.

Her baby had been left in a house between the lines.

"Wait a minute, I'll get it." And in through the rain of bullets he dashed, kicked open the door, seized the child, and carried it, struggling and howling, to its mother.

"Here's the baby," he said. "But what in thunder is it making such a row about?"

"Oh," said the woman, "she is crying for her doll and her doggie."

"Is *that* all?" said the marine, and back he went through the bullets, returning in a few minutes with a nondescript pup and a bedraggled doll without a head.

The boys from America's towns and farms have nearly driven those Frenchmen wild yelling for pancakes and syrup—and ham and eggs. When the Eagle Hut in London, unable to withstand the great American yelp any longer, finally served pancakes one day, the place was literally mobbed by howling Yankees. Thousands of pancakes are now served in Europe every day, whereas before the war they didn't know what they were.

And fried eggs! Well, Mrs. Nannie Stroud fried 1,236 eggs on both sides in ten hours one day for American soldiers at a hut in Liverpool. And if you have gone to town lately and tackled restaurant prices in this country, you know from the following that the boys are having it a lot easier financially while on leave over there than we're having it here:

Coffee, 2c; sausages and potatoes, 12c;

liver and bacon, 16c; beefsteak and onions, 20c, also roast beef and roast mutton; meat pie, 6c; and other prices in proportion.

So don't worry about your boy on the score of his health, happiness, and clean life. Not long ago in an Atlantic City hotel there sat a Canadian major who had seen three years of fighting at the front, with all that that entails. With him was a Cleveland attorney who had not yet recovered from the shock of seeing his two sons march away to a life never considered even a probability for them. Anxiously the father hazarded a question:

"Will our boys be so brutalized by war that when they return they will not enjoy the finer things of life which have been theirs for years?"

"No, indeed!" The major spoke quickly. "Get that idea out of your mind right now. That is not the spirit of this war over there. Your boys will come back able to look womanhood straight in the eye. They will shed the brutalities of war as they shed shadows when they step out into the sunlight. Bestiality is the boche's game. We see it out there, but it does not touch us. It is the very thing you fear that those boys are over there fighting to stamp out of the world."

A group of American boys passed through the ruins of a village close up to the lines one day a short time ago. Three or four French kiddies ran after them, begging for something to eat. The soldiers gave them something, and the youngsters made off toward a wreck of a cottage down the street. The soldiers followed. At the door they saw the children give the food they had received to a hollow-cheeked woman lying on the floor in the corner of the room. She was a refugee from Belgium, and these were her children. Her baby girl had died that morning, and she had lacked the strength to bury the little mute bundle which lay by the wall at the other side of the room. The other children didn't know how to do it.

On learning this, the Yankees went out quietly and quickly, took up a collection among their mates, sent food to the family, brought help to care for the sick woman, bought a coffin, secured a padre, and made arrangements for a typical French burial for the child. If that is the way our men are being brutalized, the more the better.

Put away your pictures of rough brutes coming back to you who went away decent boys, and read the vision George W. Perkins has of the return of America's men:

"I question if very much thought has yet been given by the average person to the conditions that are to confront us when this war shall have ended. To my mind this is a question of such supreme importance that it is high time we were giving it our most earnest and thoughtful consideration.

"We have already sent more than a million young men overseas. Not young men who are semi-invalids, but the very flower of our land. We are preparing to send other millions. And it is these men who will unquestionably shape and control the destiny of the United States of America. For when they return they will hold the political positions of this country, both small and great, for many years to come.

"They are not only, therefore, going to war, but they are going to the greatest university that a body of men ever attended, and it is of the utmost importance to the future of our country that they be surrounded, so far as it is humanly possible, with all the influences that will enable their minds to develop along the broadest and most rational lines.

"A Y. M. C. A. secretary in New England recently wrote us that in the last draft twenty-three men went from his county, and that seventeen of these men had never slept away from home a single night in their lives. It staggers one to try to comprehend the colossal change that is taking place in the lives of such men as these. Picture the bewilderment, the sense of loneliness, with which they will first encounter their work.

"If they are abroad two or three years it is equally difficult to imagine the views of these men on their return to their native land. But one thing is certain: intellectually they will be broader men with greater vision than when they left here. Those millions of men over there will come back to control the destiny of two hundred million people over here."

WILLIS P. ROGERS failed as a farmer for twelve years, then he succeeded. In next month's magazine he tells the exact reasons for both his failure and his success. It is the kind of an article that will help and inspire any man who reads it.

Oakland

PARTICULARLY under present conditions can the all-year transportation needs of farm families be well entrusted to the Oakland Sensible Six Sedan. Its exceptional fitness is based on its scientific, light-weight construction which makes this Sedan weigh 300 to 500 pounds less than others of similar wheelbase, roominess and completeness. Principally for this reason it is unusually quick, active and economical, affording utmost service at low cost. Further evidence of the high utility value of the Oakland Sensible Six Sedan is noted in its large floor and seating space, permanent pillars, wide doors, efficient heater, and durable fittings.

The high-speed overhead-valve Oakland Sensible Six engine delivers 44 full horsepower at 2600 r. p. m., or one horsepower to every 56 pounds of car weight in this Sedan model. Oakland owners regularly report gasoline returns of from 18 to 25 miles per gallon and records of from 8,000 to 12,000 miles on tires.

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OAKLAND

SENSIBLE SIX

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Every owner or prospective owner of a "Fordson" should investigate the

Roderick Lean

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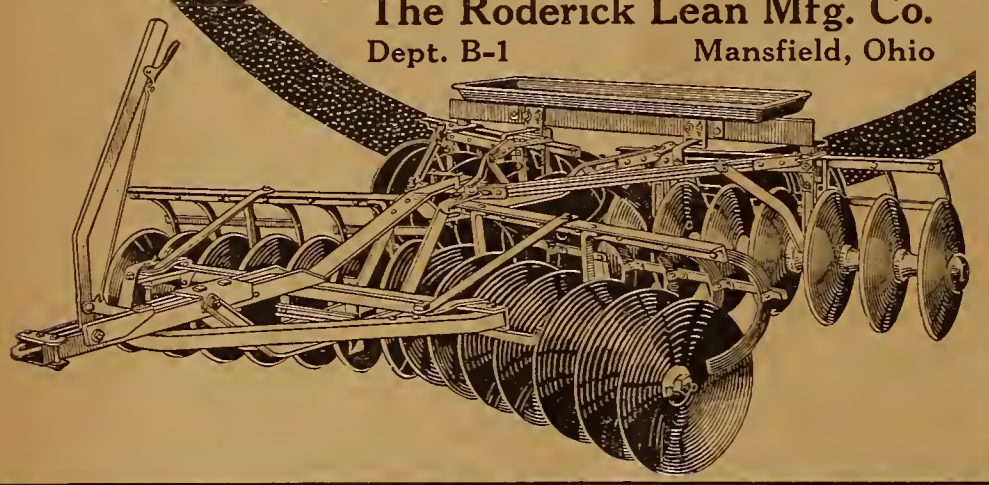
Its flexible rear section permits quick, short turns. Rear gangs cannot track with front. Heavy enough to cut soil under practically all conditions, but light enough not to overtax your motor. Adjustable scrapers keep your discs clean and free from rubbish. Made in 6 and 7 ft. sizes, with 16 and 18-inch round or cutaway discs as preferred. This is the disc equipment that is being recommended by "Fordson" dealers everywhere.

See this tool at the nearest general distributor's or write us for prices and full particulars.

The Roderick Lean Mfg. Co.
Dept. B-1 **Mansfield, Ohio**



A Volunteer on the Way to Verdun

[CONTINUED FROM PAGE 7]

changing, with the actors, to the accompaniment of a great organ with the loud stops pulled out—a monotonus overture of death. It was all so unreal, so fantastic. I felt like pinching myself to make sure I was really alive and it wasn't a dream.

Far ahead in the blue sky my eye caught a pattern of tiny balls of white much like cotton-batting popcorn balls. A boche *avion* was spying out the land between doses of the French "archies," or anti-aircraft guns. Just before we turned into the last stretch of straight road before reaching the city, I saw above the treetops several black dots. They were the German observation balloons, or, as the French call them, *les saucisse*.

On each side of the hills were clusters of wooden huts — long structures for housing more troops. Stacks of fodder and building material were grouped at intervals along the railways, which seemed everywhere. In the fields and under the trees were munitions, hidden under *camoufleur* of painted canvas.

R. B. Wooley and the ambulance he drove at Verdun

We crawled along the last four or five miles at a snail's pace. The little village of Regret, at that time used as officers' headquarters, was crowded with limousines bearing the flags of the Staff. There were more racing cars and trucks, some packed snugly in a big barn, others lined up under the trees. A little gray "bug" machine flew past, making a great noise and piled high with pigeon crates. Everything and everywhere was system, orderly movement. Everything was organized. Everybody had something to do, and was doing it.

We continually passed motor trucks in squads of six, each loaded to capacity with steel or iron beams, wood for fire, bundles of rushes for making roads in the swamps, crushed stone for the roadway, etc. And last, but not least, were the squads of poilus packed ten to twelve to the truck. They always had a cheery smile or a wave of the hand for us.

Occasionally one would call out in English. Once I heard American slang—"Oh, you kiddo!" Throughout all France to-day nearly every poilu has his pet word to throw at his American comrade. This made us feel at home. These were men of our division, the 126th, of whom we were to see a great deal later on, under variously trying circumstances.

Now we began to see more houses in various stages of destruction—the souvenirs of German onslaught. From one sagging doorway a French officer grinned as his *petit chien* scampered, barking, alongside. At another spot the whole front of the house had been blown inward. The empty shell gaped hideously at us as we crawled past. The ruins of another—what had evidently been a beautiful brick-and-stone mansion—had a rakish look, part of the roof having slid down over the portico, while blank, glassless windows stared at us like sightless eyes. Not one house was intact. In the rear many flowers bloomed in profusion. The red poppy bunched in the fields and merged with roses, uncut, in the deserted *jardins*.

Mounted gendarmes with short carbines slung across their backs patroled every mile of the way. Very clean and natty they looked in their smart gray tunics and braided caps. They are not much liked, these fellows, for they are the military police. One time, a month later, I saw two of them escorting a man in chains along the road. On my return trip near the same spot I heard several rifle shots behind a clump of bushes. I wondered....

Crudely painted signs tacked on trees pointed the way to fortifications and trenches up in the hills to the right. Narrow mud roads branched off at right angles, and were *camouflaged* with strips of burlap and canvas, or false hedges made of rushes and leaves, strung so as to conceal the road from prying eyes in the German balloons and observation posts. Even the telephone wires were cleverly concealed in the foliage or the rocks.

Just before reaching the suburbs of Verdun the green grass and foliage ends. From here on the eye sees only raw earth, pot-marked and furrowed by trench and shell. On the distant hills the splintered toothpicks that were once green forests stab the sky. Lighter colored furrows zigzag their way up the sides of the hills like a pair of steps laid sideways. Far ahead the bald knob of Douamont dominates the horizon. Funny little geysers of black smoke are rising up from the crest of the hills overlooking the Meuse, and hanging in the air before dissolving in the breeze.

The echo of the guns rolls louder. We turn off the main road to the left into the suburb of Glorieux, over a small bridge, and double back the way we came, this time on the other side of the little ravine. A slight up-grade, on a dusty road, brings us to our quarters in the hospital of Glorieux, which is merely a collection of long, low wooden buildings painted brown, each *batiment* with its bright red tile roof.

We climbed wearily down from our dusty seats. The men of Section No. 8 and their comrades, *Section Sanitaire Anglaise No. 18*, watched us gravely as we stretched ourselves and slapped the dust from hat and uniform.

Annamite troops from French colonial possessions widening the "sacred road" to Verdun that helped save France

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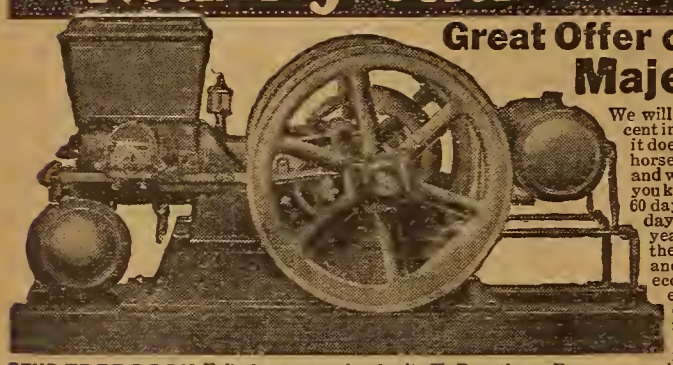

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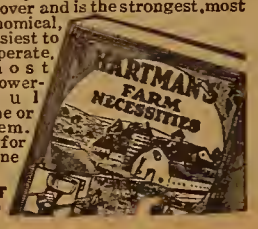

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Losses from Neglect

By T. M. Fredrick

"OLD Jim Hudson's place is going to the dogs fast," said the county agent, pointing to a run-down farm to our right, as we whirled along the dusty road.

I looked in the direction indicated and took special note of the horrible existing state of affairs on the place. There was no reason to dispute the county agent's word. It was going to the wall about as fast as the wind, weather, and carelessness would let it go.

"Look at that mower standing there in the field," he continued, as we approached a

Straw spreaders are becoming more popular on our Western farms

patch of poor stand timothy and clover. "That piece of machinery was new last spring, but it doesn't look like it now. It's been out there in all kinds of weather for three months or more, and I'll bet there isn't a place one inch square on it that isn't rusty. Everything Hudson has on his place is in the same condition. Look at those buildings over there. The roofs need repairing and all of them could stand a coat or two of paint."

"The man must be lazy," I ventured.

"Not exactly that," the county agent replied, shaking his head. "I wouldn't call him lazy, for he's a mighty hard worker. But he's careless and neglectful. He simply doesn't understand how to take care of his belongings properly.

"How would you handle it if you had it?" I asked.

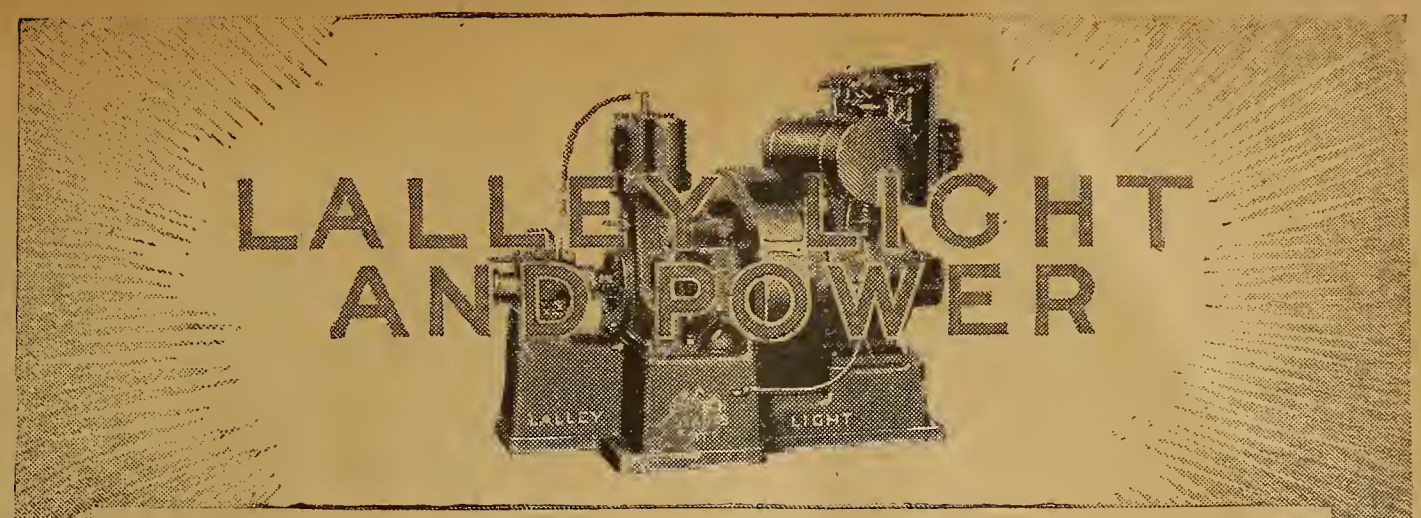
"If I owned that place and the machinery on it I'd have a regular system to follow. For instance, just as soon as I were through using a piece of machinery I'd clean and oil it thoroughly, and go over it carefully and tighten all the loose nuts and

Another instance of the tractor's adaptability

bolts. After it were put in good order I'd place it under a shed out of the rain.

"Periodically, say about twice a year, I'd give all my buildings a thorough inspection to see if they needed painting or repairing. Nothing adds so much to the value of property as keeping it in good condition. Broken and worn-out fences are among the worst things of all. Whole fields of grain have been destroyed by defective fences, which go to pieces and allow cattle to trample it.

"That man Hudson isn't the only one in this neighborhood who is careless and neglectful. I've been talking to these fellows, and trying to show them how many hundreds of dollars they are losing every year, and most of them are getting wise to their losses.



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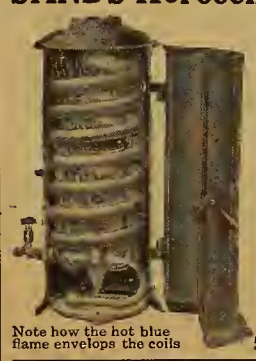

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True Fish Stories

Photograph from Margaret Jaques

A LOT of fiction seems always to have been mixed up with fish stories—probably because fishermen have such a lot of time to think. But these are true. The fellows who told them to us said they were, and they sent along their pictures to prove it. R. M. Southworth and Dr. W. S. Walters, above, had spent a profitable day trout-fishing in Eighteen Mile Creek, Wisconsin. On the way home at dusk, with their catch, they met a big black bear. Realizing that fish poles are not much good against bears, they ran. The bear followed. Just as the company became a crowd, they threw the whole catch of fish in the bear's face. The bear grunted, stopped, and the men got home in time for a fishless supper.

HOMER LEE, a Kansas man, doesn't just drop a hook into the water and pull in the first thing that bites it. No. He goes out for a walk along the bed of a river, armed only with this converted broomstick and a knife. With his bare feet he feels in the holes for dozing catfish. Down he jabs the big hook into the fish just back of the gills. "Some of those big cats can put up a great battle," says Mr. Lee. "I wrestle with them till they are exhausted. Biggest one I ever hooked got away. [Where have we heard those words before?] He jerked me off my feet and up and down. I should have drowned if the strap fastening the stick to my wrist hadn't broken. I never saw the fish again, nor my hook. He must have weighed a hundred pounds."

Photograph from David Baxter

SPEAKING of fish stories, Miss Lachmund of Yonkers, New York, was a member of a party that caught this pretty fawn while fishing. The fish weren't biting, but a dark object appeared in the water. Someone made a lasso with the trolling line, and now Baby has the nicest kind of a playmate.

Photograph from Robert H. Moulton

DIXIE CARROLL, fishing in Minnesota with a gold-plated spoon, got a strike from a grand-daddy pike. The spoon flew off the line. Dixie tried others—silver, pearl, nickel, but the pike was high-class, and disdained the baser metals. So Dixie tried the gold piece that was his fare back to Chicago, and the pike, taking it on the jump, was landed after a strenuous half-hour, gold piece and all.

MOST people fish from above, so Secretary McAdoo prides himself on having once caught two fish from the bottom up. It was when he was building the Hudson tubes and was personally inspecting the work. A small break occurred directly over his head, letting in a lot of water, and in the excitement Mr. McAdoo was able to get away with two large ones, which he took home for dinner.

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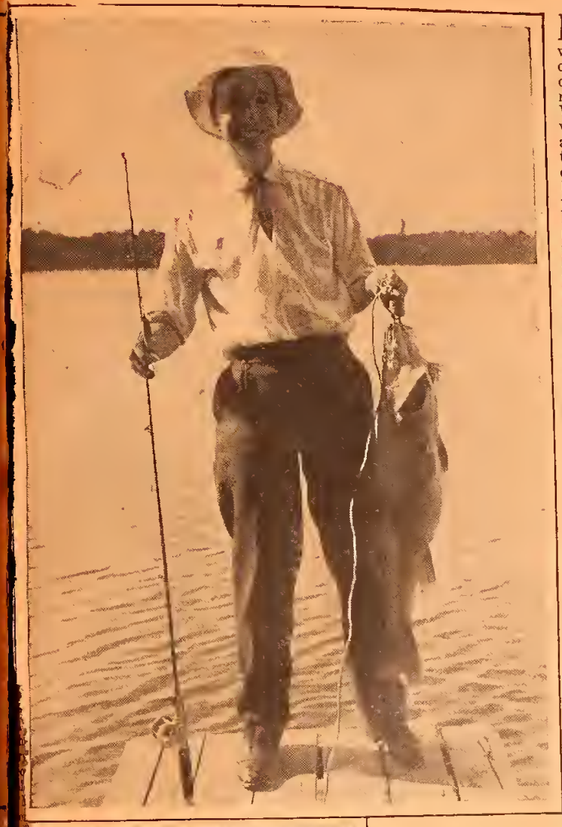

ROBERT H. MOULTON of Chicago, who is always telling good stories on other people, sends this one on himself: While fishing near a dam at the outlet of a Wisconsin lake, he booked a wall-eyed pike that weighed almost thirteen pounds. In the excitement he let both oars slip away, and found himself drifting toward the thirty-foot dam, helped along by a stiff wind. Just at this point Friend Pike decided to seek shelter behind an old log sticking end up out of the water. Then he changed his mind and doubled on his tracks, with the result that both boat and fish were stopped. Mr. Moulton held on to the line and yelled for help. The fish stayed where he was and did not yell. Shortly the fish was saved, also the fisherman.

Photograph from J. R. Henderson

CATCHING 357 pounds of fish in two hours with his bare hands (these stories get better as you go along) is one of Z. D. Adamson's feats. "Zed's" methods are simple. He dives into a river,—one of his records was made at the junction of the Grand and the Neosho,—swims about under water till he spots a fish, grabs it by the gills, brings it up, and throws it into boat. He charges $2.50 an hour, and guarantees not less than two pounds an hour. His record is 180 pounds of fish in thirty minutes.

Photograph from Charles W. Lennett

"CAP'N JIM"—as they call him—of Orr's Island, Maine, is the only man known who has ridden a blackfish. "'Twas in the bay between Harpswell and Orr's Island," relates the captain, "that we sighted about eighty blackfish. Some call 'em round-headed dolphin. The biggest one was twenty-three feet long. We got together nine boats and twenty-one men, and hammered away at the critters for five hours, only killing six of them. Then we started to try to drive 'em into a cove. Our boat came up alongside one, and I tried to hit that round head with an ax I had. Tumbled out of the boat and on to his back. I hung on and got him headed for the cove, and all the rest followed. We got the lot in there—$2,000 for us, and quite an exciting ride for me, you may depend."

Photograph from A. M. Stoddart

FRED A. Bishop of New York spends his midwinter vacation in Florida, fishing. He is a first-rate fisher of fishes, having taken sixteen-pound channel bass with a rod weighing five and a half ounces. But he is more remarkable for the fowl he catches with his trusty rod and line. First it was a canvasback duck feeding on a mud flat. Mr. Bishop made a neat cast, and brought in the mallard by the wing, unhurt. Next he cast with a home-made plug in the direction of a pelican feeding. When the bird ducked to pick up the plug, Bishop bagged him in the bill. He also snares an occasional seagull.

Photograph from A. M. Stoddart

AWHILE ago, fishing with rod, reel, and plug, T. N. Burket of Lincoln, Nebraska, caught a deer. It was in a Florida river, and it was embarrassing because the deer was dead when he brought it in, and it was the closed season. The too skillful angler went to the judge and got absolved from blame. And Mr. Burket's luck hasn't changed yet. Last March he took a tarpon weighing 112 pounds with his wood plug.

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Increases Farm Efficiency

IT'S no hardship to do the chores after dark these long evenings if you have Delco-Light.

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Running water everywhere.

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The Domestic Engineering Company, Dayton, Ohio

There is a Delco-Light man in your locality

Delco-Light is a complete electric light and power plant for farm or country home.

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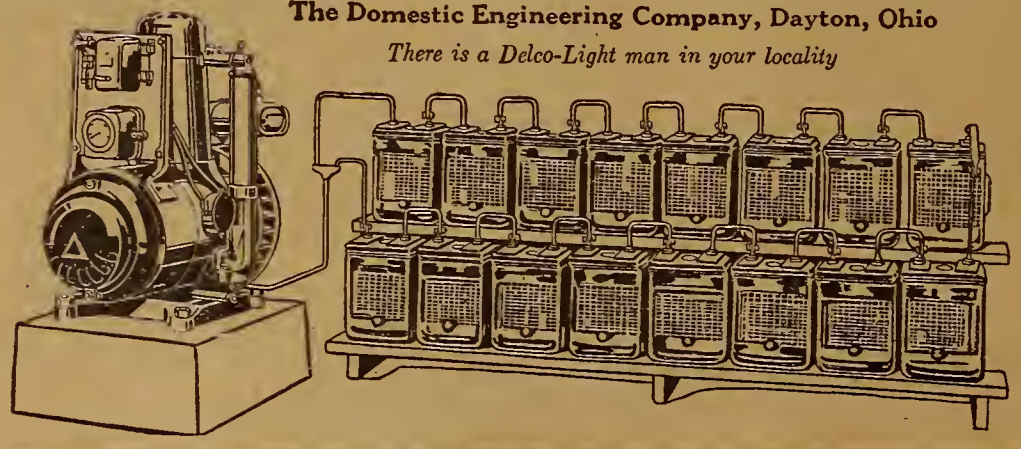

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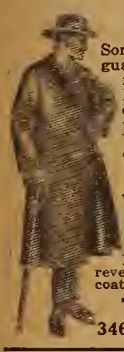

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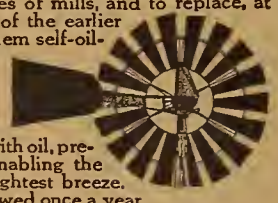

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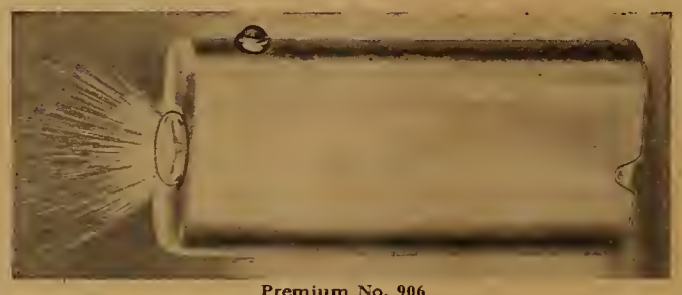

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Any live boy or girl can earn this flashlight in an hour. See your neighbors and get *three* of them to pay you 25c each for FARM AND FIRESIDE one year. Send us the 75c and the names and addresses and we will send you this dandy R. V. G. FLASHLIGHT, complete with battery and lamp, by parcel post prepaid.

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We have only a small stock of flashlights. Write your names on a sheet of letter paper and say, "Send me your R. V. G. Flashlight." Send money by P. O. order or stamps. ADDRESS

CLUB-RAISER DEPARTMENT
FARM AND FIRESIDE SPRINGFIELD, OHIO

Comparative Prices on What You Buy and Sell

By Committee on Public Information

WHEAT appears to have fared well among the commodities which have ascended in price during the war period. Contrary to a common opinion, wheat and other of the important products sold by the farmers of the country have increased in price more than most of the articles farmers have had to buy and use. Certain articles of clothing, whose costs are determined by the prices of other and hitherto uncontrolled agricultural products, as well as by wages, are the only exceptions to this general rule.

Figures collected and assembled by the Bureau of Labor Statistics of the Department of Labor, and by the Department of Agriculture, give light on this hitherto disputed question. Wheat stands high among those products which have advanced greatly in price. Furthermore, the price of wheat, even though fixed, seems on the whole—from the standpoint of the grower—to compare favorably with the selling price of other important commodities.

From a list of about 7,000 counry buyers, weighted averages based on prices assembled show that on July 1, 1918, the price of wheat had increased 164 per cent over the price for the same day of 1914. In other words, the price was nearly 2¾ times the price in 1914. Corn, according to the data supplied by the same county crop reporters, increased within the same period 103 per cent in price. Oats showed 197, hay 42, and cotton 131 per cent. Hogs advanced 107, beef cattle 65, and lambs 132 per cent within the four years.

Certain important articles of food advanced far less. Wholesale prices of June, 1918, were compared with the average wholesale prices for 1914. According to figures reckoned by the Bureau of Labor Statistics, coffee increased in price only 3 per cent during the period. Tea, however, went up 43 per cent. Rice advanced 78 per cent. Codfish went up 36 per cent. New Orleans molasses cost 45 per cent more. Prunes, on the other hand, rose only 13 per cent. The higher cost of granulated sugar was measured by 55 per cent. Cheese in Chicago enhanced in value 52 per cent.

Wheat Still Buys More

Shoes advanced much less than wheat. Between June, 1914, and June, 1918, misses' vici shoes increased in cost 96 per cent. Youths' gun-metal shoes cost 60 per cent more. Men's gun-metal shoes were rated 89 per cent higher. Cotton and woolen clothing, however, soared. Colored cotton flannel increased 296 per cent, while bleached Lonsdale shirtings cost 195 more after four years.

Farm implements, however, increased in price much less than did wheat and other of the farmer's products. Walking plows thus showed an advance of 85 per cent. Standard farm wagons increased 66 per cent, while disk drills cost 71 per cent more.

Gasoline engines went up in price only 44 per cent. Steel plowshares cost 63 per cent more.

Building materials likewise advanced less than farm products. Brick at Chicago went up 27 per cent. White oak lumber cost 26 per cent more. Red cedar shingles advanced 82 per cent. White barn pine records a rise of 61 per cent. Window glass went up 75 per cent. Wire nails showed an increase of 114, while shovels advanced 75 per cent.

These commodities therefore increased far less than wheat, even though its price was fixed.

Household articles varied. Pitchers cost 56 per cent more. Tumblers showed another tendency, and rose 158 per cent. Cups and saucers cost 89 per cent more, and cutlery's rise was measured by 107. Soap was more nearly stable, with an increase of merely 53 per cent, and starch stopped at a 60 per cent rise.

Fuel advanced far less than farm products. Refined petroleum cost 42 per cent more. Anthracite coal—chestnut—advanced only 21 per cent, while bituminous—Norfolk—indicated an increase of 41. Gasoline rose 66 per cent.

On the whole, despite governmental control, the figures assembled by the Departments of Agriculture and of Labor demonstrate that the price of wheat has advanced more rapidly and to a higher point than the price of most other articles during the war period.

GETS 28 EGGS A DAY NOW, FROM 34 HENS

Chas. C. White, Well-Known Breeder, Tells How, Costs Nothing to Try

"I gave Don Sung to 34 utility Buff Orpingtons and the egg yield increased from 7 to 28 a day. Don Sung is a wonder and I am now giving it to all my hens regularly." —Chas. C. White, Manager Cherry Hill Farm, Flackville, Ind.

Mr. White is the well known breeder and exhibitor. He wrote the above letter Dec. 2, 1917, after his test had shown a gain of 21 eggs a day from 34 hens. We will make you the same offer we made him. Here it is:

Give your hens Don Sung and watch results for one month. If you don't find that Don Sung pays for itself and pays you a good profit besides, simply tell us and your money will be refunded.

Don Sung (Chinese for egg-laying) works directly on the egg-laying organs, and is also a splendid tonic. It is easily given in the feed, improves the hen's health, makes her stronger and more active in any weather, and starts her laying.

Try Don Sung for 30 days and if it doesn't get you the eggs, no matter how cold or wet the weather, your money will be refunded by return mail. Send 50 cents today for a package by mail prepaid. Burrell-Dugger Co., 155 Columbia Bldg., Indianapolis, Ind.

$84 EARNS $700

"The Simplex works fine. My strawed wheat made 20 bu. to acre—unstrawed only 12 bu. SIMPLEX earned me $700 last fall."
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FREE TRIAL Let the SIMPLEX earn it's price while you use it. No money down, a year to pay.
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Gives you a 12 h. p. engine for less than the cost of a 2 h. p. Ford builds the best engine in the world—it will outlast the car—and you might as well save your money and use it to do all your farm work.
No wear on tires or transmission. Hooks up in 3 minutes. No permanent attachment to car. Cannot injure car or engine.
Friction Clutch Pulley on end of shaft. Ward Governor, run by fan belt, gives perfect control. **Money back if not satisfied.** Ask for circular and special price.
THE WARD CO., 2035 N St., Lincoln, Neb.

Our Adventure in Currants

By F. L. Clark

THE average person thinks jelly when he thinks currants. That they are peculiarly adapted to that purpose every farm mother knows, and also the members of her family, who testify they like "currant jelly about the best of all." But why are currants so neglected in other ways? Many markets seldom offer them for sale as a fresh fruit as they do other small fruits. They are served almost never in hotels and restaurants, and infrequently on the home table; market gardeners

Each square foot of field produced one pound of cabbage, which netted the grower one penny, or an acre income of $350

bring in their loads of strawberries, raspberries, and blackberries, but "pass up" the currant.

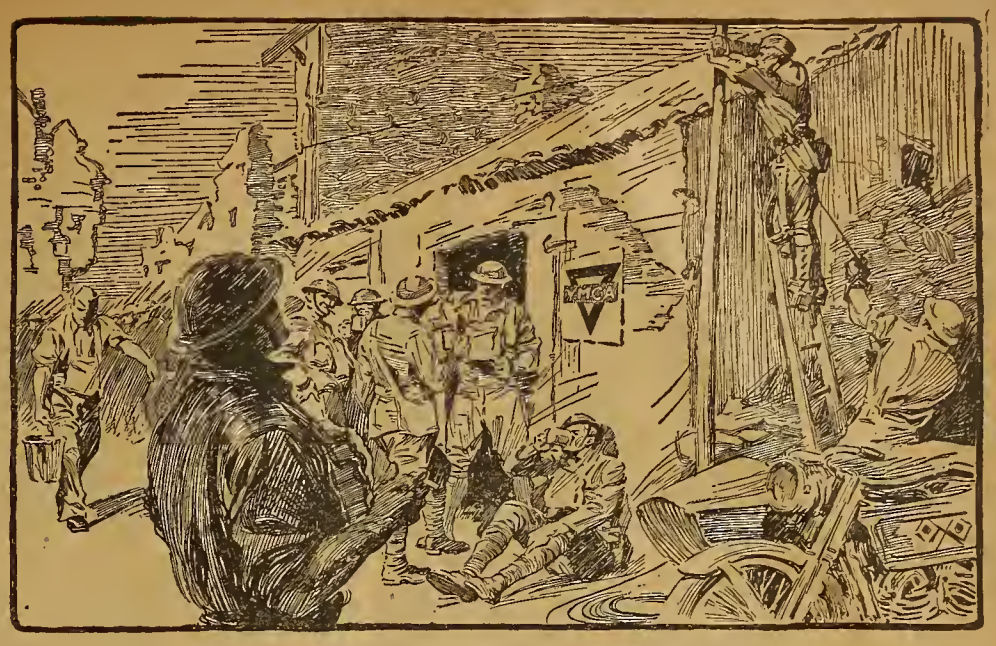
There were black and red raspberries, blackberries and gooseberries in our garden, but no currants. A little corner of the garden did not seem to be especially useful, and somebody suggested that we put in a few currant bushes. This suggestion met considerable opposition, but in the end the jelly argument won out, and the currant bushes were bought and set in two rows near the fence.

They were given little care, indeed less than anything else in the garden, but Nature was kind to them (she seems to be usually), and several years ago they began to bear. The following season the bushes were loaded. We had currant pie every few days, and we made jelly until the shelves in the fruit closet sagged with the load, but the currants kept on coming. Then we made a real discovery: currants for breakfast. A dish of the bright red berries was placed at each plate every morning. Their attractiveness tempted, but that wasn't all. We soon found they acted as a sharpener of appetite for the rest of breakfast just as oranges do. The more we ate the currants the more they seemed

A tender shrub in its winter overcoat

to "hit the spot." We drank them as well, making a cold drink of half currant juice and half water. Then one Sunday in July, a sizzling hot day, we got out the ice-cream freezer and made currant ice.

Having made all these discoveries in our adventure in currants, I need not tell you that we did not neglect our currant bushes the following season. We fertilized them, pruned them carefully, and in the spring sprayed them with arsenate of lead. The currants were larger and finer and more abundant than the previous season. We have cared for them in this way each year since.



Unarmed Arms of the Service

Men from the battle front who have been holding the line for months and years complain of the monotony of war. The soldier's life in the trenches soon ceases to be a novelty and becomes a tedious routine.

The morale of the army is of supreme importance and the greatest military authorities of the world are enthusiastic in their praise of the organizations which make it their business to keep the soldier in good spirits.

This work, like that of the Signal Corps, has been more highly developed in this war than ever before. Huts for amusement, comfort and recuperation of the fighting men are in the trenches as well as behind the lines. The unarmed workers go about their duties under shell fire as coolly and as self-forgetfully as the telephone men of the Signal Corps who are frequently their neighbors, and who keep intact, often under a hail of bullets, the indispensable lines of communication.

It is for us who remain at home to support these unarmed heroes to the utmost, with our gifts, our labor, and our unbreakable morale.

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Cabbage Cutter with 6 Knives
that always keep sharp. Slices cabbage and all other vegetables easily and rapidly. Sent prepaid for $1.00. 3 for $2.00. LUSHER BROS., Elkhart, Ind.

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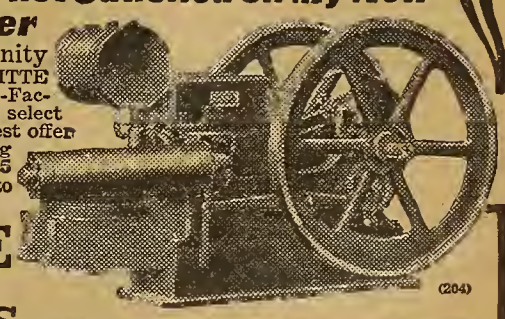

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The Caloric Will Save One Third to One Half of Your Fuel

You learned last winter that an ample fuel supply is essential to the winning of the war. That lesson should be remembered now.

You can help the Government save fuel and at the same time keep your home comfortable in every room, throughout the winter, by using the

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The **Original Patented Pipeless Furnace**

Six thousand of the more than 50,000 Caloric users have testified to the economy, convenience and comfort made possible by this wonderful invention. In their letters, they tell us that the Caloric saves from one-third to one-half of their fuel.

Here is some of the evidence taken from these remarkable testimonials:

Irvin Lamb, Lancaster, O., writes that in his ten-room house, "All winter, the coldest Central Ohio has had in my life-time, we burned *only six tons* of soft coal to keep us warm through all the house."

H. A. Varner, Enola, Neb., has an exposed eight-room house on his farm. He says: "As a fuel saver the Caloric was a welcome surprise. It took *only 4260 pounds* of soft coal and three cords of block wood to keep my entire home warm and comfortable all winter."

H. I. Stearns, Brookings, S. D., says he kept his eight-room house comfortable all winter, even when the temperature dropped to 30° below, at a total consumption of *only four tons* of coal.

Mrs. W. P. Emery, living in a large nine-room house near Highland Center, Ia., writes: "The winter before we heated part of our house with a big base-burner and a soft coal stove, and we used over $100 worth of coal. This winter every room was comfortable, coal was higher, and yet our *heating cost us only $53.*"

Have the nearest Caloric dealer demonstrate this coal conserving furnace for you. He will explain fully how it will heat all your house through its one register. He can also refer you to Caloric owners in your section.

Write to us for our Caloric catalog. It describes and illustrates the principles of pipeless heating upon which the operation of the Caloric is based. It also tells how you can take advantage of our free Engineering Service. Send a postcard for this book today.

Burns Coal, Coke, Wood, Lignite or Gas.

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Shipments also made from Harrisburg, Pa., Rochester, N. Y., Omaha, Neb., Minneapolis, Minn., Cedar Rapids, Ia., Green Bay, Wis., Kansas City, Mo., Saginaw, Mich., Spokane, Wash., and Salt Lake City, Utah.

larketing—the Farmer's Biggest Problem

[CONTINUED FROM PAGE 11]

e highest price. They are bought by cking plants operating outside of the Middle West markets. They are like butcher hogs in shape and quality, are generally lighter, not being as high-inished. They carry comparatively little f fat, and are similar to the bacon hog, e difference being that they are shorter in thicker. The carcass is generally d for the Eastern trade.

Pigs are sold according to the weight d quality. There are no set grades. They igh from 60 to 125 pounds. Many of the s are sent back to the country for finish-

There are three classes of sheep—mut-n, feeder, and breeding sheep. The mut-n class consists of lambs, yearlings, ethers, and ewes. The feeder class con-sts of the same, while the breeding divi-n is made up of ewes and bucks.

Lambs are the most important of the arketing end of the sheep business. A ime lamb is one that weighs around 80 unds, has a well-developed loin, back, d leg of mutton. These are the principal ts on lambs, because they are the high-ced cuts. Lambs should be free from unches and built close to the ground. ie quality should be of the best, as indi-ted by a medium, clean-cut head, fine s, fine bone, and smooth, well-rounded lines.

Lambs weighing about 80 pounds, if rying good condition, sell better than nbs weighing more than that, because the ter animals dress out a better carcass. many markets the smaller carcasses in greater demand.

The fleshing of a lamb should be deep, n, and firm, but not hard. The proper ree of fatness is indicated by a thick k, thickness and smoothness over the s and back, a well-filled flank and neck, ep and thick breast.

Lighter Lambs in Demand

Native lambs, when properly finished, ually weigh around 100 pounds, and this one reason why they do not sell as well prime Western lambs. Most of the nbs coming to Chicago grade choice. ie requirements are similar to the prime nbs, but a choice lamb may be deficient quality, condition, or weight—just ough not to be prime.

Good lambs show a marked deficiency form, quality, condition, or weight. For e most part, however, quality and con-ion are the points which put these lambs wn.

The killers get few medium grade lambs, being a feeder grade. However, some nbs, even though they have been fed, e not even good enough to class as good, they are graded medium. Western lambs e usually classed as medium, and are sold feeders. They have quality and form, d when finished usually grade prime or oice—seldom lower.

Common lambs include all the cut, rse, ill-shaped, and thin lambs. Lots of buck lambs which have not been un-ed are sold as common lambs. Yearlings wethers have the same grades, and the nts stated in the lamb division are those ed for in the sale of yearlings and weth-also sheep.

To be a fair judge of stock a person must e a prime animal in mind. From this, owing what constitutes the other classes, can easily judge what they will grade, d knowing what the market prices are, can figure out about what his stock will ng.

It may be truthfully said that the feeder ows good cattle—that is, prime cattle ut he cannot tell what the grades be-w prime are. For this reason many are satisfied with the prices they get at arket. Perhaps they have a right to be ssatisfied, but with a knowledge of live ock they will be able to figure out just hat their stock will bring before it is arketed.

A knowledge of market classes of stock especially valuable to the person who oduces only a limited number of cattle, gs, and sheep, and sells to his local upper.

T WASN'T the medicine he took that ired the farmer whose land was going to rack and ruin because of his ills. Maybe hat he has to tell will apply to you if u're not feeling well. Read his story in ecember Farm and Fireside.

How the packer is saving millions out of waste

—and how this results in higher cattle prices for the stockman

The development of by-products out of waste means a saving of about one hundred and fifty million dollars annually—a sum sufficient to keep New York's six million people supplied with meat for six months.

THERE was a time when the steer was handled solely for its edible meat, its hide, and its tallow.

The remainder of the animal, in weight totaling many millions of pounds annually, was thrown away—a sheer waste.

Today virtually all of this former waste is utilized. Over 250 articles are now contributed by the steer to human needs, and a larger proportion of the animal is saved for human food.

At the time of writing $135 is, on the average, the price paid for the average beef animal to the stockman by Swift & Company.

But if the old order of waste still prevailed and only the hide and tallow were saved, Swift & Company would be obliged either to pay not more than $125 to the stockman, or to charge the public higher meat prices.

Thus, you see, by-product utilization results in a saving of about $10 per animal—a saving which, when multiplied by the total number of cattle dressed annually by Swift & Company, over two million, amounts to more than twenty million dollars annually. This saving goes to the stockman in higher cattle prices and to the consumer in lower meat prices.

If applied to the entire number of cattle dressed annually in America, approximately fifteen million, this saving would amount to about one hundred and fifty million dollars annually.

The real development of by-products came with the development of the larger packing organizations.

Success was attained not easily, but by patient effort, by exhaustive experiment, by intense specialization. It has been a big job and has called for big methods—a job far beyond the resources of the old, unorganized system of local meat dressing.

Not only are the by-products saved but their value has been increased through better handling of hides, fats, and other edible portions of the steer.

Swift & Company is glad to have had a part in this development. It is an achievement of thrift—an achievement that has made possible today lower meat prices to the consumer and higher prices to the producer of cattle than would have been possible under the old methods.

Swift & Company, U. S. A.

A nation-wide organization owned by more than 22,000 stockholders

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FUR NEWS, 71 W. 23d St., New York, Room 401

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Let us send this fine Razor for 30 days' free trial. When satisfied after using, send $1.85 or return razor. Order Today. JONES MFG. CO., 136 W. Lake St., Dept. 1143, CHICAGO

Get More Eggs On Less Feed

Egg prices this winter will undoubtedly be the highest in the world's history. Those who know how to feed to get winter eggs will reap enormous profits, while improper methods mean a loss.

Prof. T. E. Quisenberry, one of the world's greatest poultry authorities and President of the American Poultry School, Box 922, Leavenworth, Kansas, has issued a 16-page bulletin on "How and What to Feed For Heavy Egg Production and to Cut the Cost of Feed." This Bulletin will be mailed Free to interested readers, while they last. Hundreds of hens fed and cared for under Prof. Quisenberry's direction have laid 200 to 298 eggs per year, while the normal production according to U. S. Government reports is 60 to 80 eggs per year. Write today for your copy of this valuable Bulletin.

Apollo

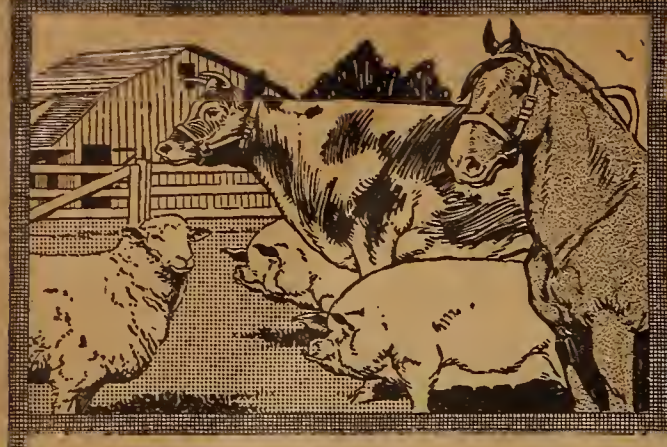
Full weight—Galvanized—

Roofing Products

In country or city—for farm buildings or residences, metal roofing is positively unequaled.

APOLLO-KEYSTONE Copper Steel Galvanized Sheets are the most durable, rust-resisting galvanized sheets manufactured. Actual weather tests have proved the superiority of this material for Roofing, Tanks, Culverts, etc. KEYSTONE COPPER STEEL is also unexcelled for Roofing Tin Plates. Look for the Keystone added below regular brands. Sold by leading dealers. Send for free "Better Buildings" booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.



Don't Let Your Stock

Lose their Summer's gain through November neglect

Your animals are now going on dry feed—hay and grain. It's a big change from the succulent, nutritious grasses of summer pastures which supply the needed laxatives and tonics.

Keep your animals' bowels open and regular—drive out the worms—keep their blood rich—keep their digestive apparatus in order—by feeding Dr. Hess Stock Tonic.

A Conditioner and Worm Expeller

Don't allow your stock to "get off feed" and in a rundown condition. Dr. Hess Stock Tonic eliminates waste and gives appetite, good health and good digestion. It enables animals to get the most benefit out of their feed.

Buy Stock Tonic according to the size of your herd. *Here's a suggestion for your guidance:* Get from your dealer 2 pounds for each average hog, 5 pounds for each horse, cow or steer, to start with, feed as directed and then watch results.

Why Pay the Peddler Twice My Price?

You buy Dr. Hess Stock Tonic at an honest price from a responsible dealer in your own town who guarantees it, and who refunds your money if it does not do as claimed.

25-lb. Pail, $2.25; 100-lb. Drum, $7.50

Except in the far West, South and Canada

Smaller packages in proportion

DR. HESS & CLARK, Ashland, Ohio

DR. HESS STOCK TONIC

Dr. Hess Poultry PAN-A-CE-A

Will Start Your Pullets and Moulted Hens to Laying

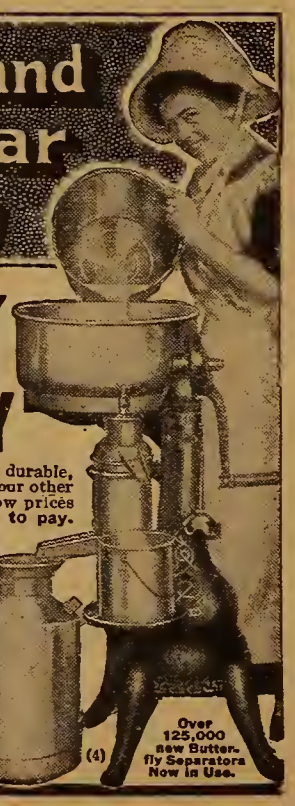
Dr. Hess Instant Louse Killer Kills Lice

Ship Your Furs direct to Mr. Pfaelzer

He's the man who helped make New York the world's Premier Fur Market—leader of liberal assortments—of high prices—instant settlements—the square deal. Mr. Pfaelzer will help you buy Liberty Bonds and War Savings Stamps by being unusually liberal for quick shipments. He needs your furs. No shipment too small. None too large. His money awaits your Pelts.

M. F. Pfaelzer & Co. 115-123 WEST 29TH STREET (Desk 10), NEW YORK
Members Raw Fur Merchants' Ass'n

Only $2 DOWN and One Year To Pay



For any Size—Direct from Factory

You can now get one of these splendid money-making, labor-saving machines on a plan whereby it will earn its own cost and more before you pay. You won't feel the cost at all.

$38 BUYS THE NEW BUTTERFLY

No. 2½ Junior—a light running, easy cleaning, close skimming, durable, fully guaranteed separator. Skims 120 quarts per hour. We also make four other sizes up to our big 800 lb. capacity machine shown here—all sold at similar low prices and on our liberal terms of **only $2 down and a year to pay.**

Patented One-Piece Aluminum Skimming Device, Rust Proof and Easily Cleaned — Low Down Tank — Oil Bathed Ball Bearings—Easy Turning—Sanitary Frame—Open Milk and Cream Spouts.

30 DAYS' FREE TRIAL GUARANTEED A LIFETIME
Against defects in material and workmanship

You can have 30 days FREE trial and see for yourself how easily one of these splendid machines will earn its own cost and more before you pay. Try it alongside of any separator you wish. Keep it if pleased. If not you can return it at our expense and we will refund your $2 deposit and pay the freight charges both ways. You won't be out one penny. You take no risk. Postal brings Free Catalog Folder and direct from factory offer. Buy from the manufacturers and save money. Write TODAY.

ALBAUGH-DOVER COMPANY, 2139 Marshall Blvd., Chicago, Ill.

Over 125,000 new Butterfly Separators Now in Use.

Boosting Better Stock

By R. D. Jay

GET-TOGETHER movements among live-stock breeders are less of a novelty than was the case a few years ago, but there is still need of stimulating such movements in many counties of even some of our best stock-raising States.

Two years ago several leading minds in Carroll County, Missouri, arranged a four-days' live-stock campaign in the form of an automobile tour, made up of leading stock breeders, stock judges, stock buyers, in charge of the county agent. The cavalcade journeyed throughout the county, making stops in accordance with a previously mapped out and well-advertised schedule.

At the farms visited, stock was examined and judged by experts and comparisons made by breeders, stock buyers, and experienced butchers.

The result of the four-days tour was an entirely new attitude toward the matter of improving the stock of the county, which movement also embraced better methods of stock selling as well as the full-

Judging sheep in a school on wheels. Special live-stock and grain trains are often run by the agricultural colleges

est use of the best breeding sires that could be secured, including horses, cattle, sheep, and swine.

Only two years have passed, yet there are hundreds of stock raisers in Carroll County who have convincing figures to show how the quality and uniformity of their stock brings them $300 to $500 greater income annually than would have resulted from their former breeding operations.

One of the factors that is now doing much for stock betterment is the co-operative plan of passing on the best proved sires from one community to another, instead of the old method of individual ownership of sires and sending them to the block at the age of one or two years.

Altering Male Calves

By M. N. Harrison

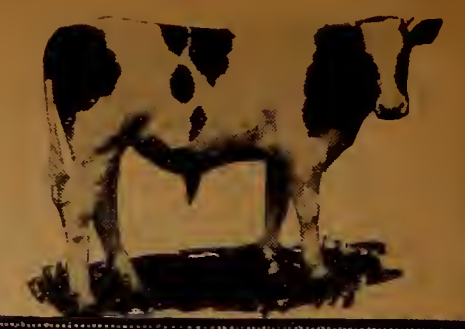
THE most desirable age at which to alter male calves is six months. By this time they have a good sturdy frame and have sufficiently developed male characters that they will make good strong steers. Plenty of antiseptic should be used, and the knife and the hand of the operator as well as the field of operation should be scrubbed with a two per cent solution of any standard disinfectant.

The best time of the year to alter calves is in the spring and fall, just after winter has broken and before fly time. In the North, April and October; farther south, March and November.

Animals cannot be safely dehorned, altered, and vaccinated at the same time. There is a tendency among stockmen to do this, thus preparing the stock for pasture without the extra effort of handling them twice.

The danger is that when calves have been dehorned, altered, and vaccinated in one operation the loss of vitality and the shock to the system is so great that they will often develop blackleg as a result of the injection of the vaccine, which consists of a weakened preparation of the disease virus.

THOMAS J. DELOHERY will tell you in the December Farm and Fireside how to keep your stock from eating up your profits. His article is full of things every farmer ought to know.



Grew 2 3/10 lbs. a day

This was the average daily gain made by this sturdy calf, fed only on

Blatchford's

Blatchford's Calf Meal raises splendid calves at ¼ the cost of milk. The other ¾ stays in your pocket as **clear profit.**

Write for Pamphlet Shows you how to make two profits instead of one.

Blatchford Calf Meal Co.—Dept. 4038—Waukegan, Ill.

SELDOM SEE

a big knee like this, but your horse may have a bunch or bruise on his ankle, hock, stifle, knee or throat.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

will clean it off without laying up the horse. **No blister, no hair gone.** Concentrated—only a few drops required at an application. $2.50 per bottle delivered. Describe your case for special instructions and **Book 8 R free.**

W. F. YOUNG, P. D. F., 23 Temple St., Springfield, Mass.

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protect yourself! Shoe with "Capewell" nails. No crimping or splitting to injure the foot. No loss of the animal's services. Not the cheapest nail regardless of quality but the world's best at a fair price. Insist always upon "*The Capewell*" nail Saves time, losses, trouble.

MINERAL HEAVE COMPOUND In use over 50 years

Booklet Free

$3 Package guaranteed to give satisfaction or money back. $1 Package sufficient for ordinary cases.

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No matter how old the case, how lame the horse, or what other treatment failed, try

Fleming's Spavin and Ringbone Paste, $2 a Bottle

One application usually enough. Intended only for established cases of Bone Spavin, Ringbone and Sidebone. Money back if it fails. Write for **FLEMING'S VEST-POCKET VETERINARY ADVISER.** It is FREE.

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DEATH TO HEAVES! NEWTON'S

HEAVE, COUGH, DISTEMPER AND INDIGESTION COMPOUND cures Heaves by correcting the cause—Indigestion. Prevents Colic, Staggers, etc. Best Conditioner and Worm Expeller. 26 years' sale. Three large cans guaranteed to cure **Heaves or money refunded.** The 1st or 2nd can often cures. $.60 and $1.00 per can at dealers' or prepaid by parcel post. Booklet free.

THE NEWTON REMEDY COMPANY, Toledo, Ohio

Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

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Don't Keep Loafer Cows

Write today for this new free book explaining how to keep records of milk and butter produced by each cow; how to test milk; protects you against keeping loafer cows, etc. This is only one of the 20 equally helpful articles in this free book, called

20 Ways to Make the Farm Pay More

We send this large book free because it shows the kind of farming secrets told in the 2000 pages of FARM KNOWLEDGE—the new Farmers' Own Encyclopedia, about which we want you to know. Don't miss this *free book.*

Write Postal Now

Just send your name. Learn how to avoid losses by keeping accurate record, and new ways to make your farming operations pay you more money. Simply say "Send me 20 Ways to Make the Farm Pay More." *It's Free,* but it may be worth many dollars to you.

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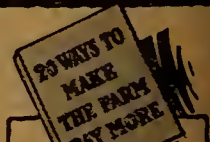

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describes the newest and most successful secrets of the following:

1. How to Make Babcock Test.
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And other subjects of equal interest to every farmer. Write today.

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Don't Sell All Your Hogs

Save a few and be sure of good meat for your own use when wanted. You can do it easily with the National Giant Smoke House. This wonderful Smoke House is portable, can be taken into basement or kitchen and operated same as a stove—or on the back porch, or in the yard—anywhere.

Operates on sawdust and cobs, and little hickory bark for seasoning. Gives you better, sweeter, cheaper meat than you've ever had before. Hundreds in use all over U. S., Canada, Cuba, S. America.

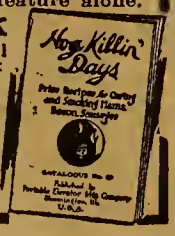
A 5-YEARS' SUCCESS

Positively the best way of smoking hams, bacon, sausages. Made in 3 sizes. Guaranteed.

After smoking meats, use for Store house. Absolutely bug and mite proof. Keeps meat sweet all summer. Worth its price many times—for this feature alone.

GET FREE BOOK

Learn all about this wonderful new way of smoking meat. Book tells when to butcher, about storage, how smoke house operates, etc. Also gives prize-winning recipes for curing Hams, Bacon, Sausages at home. Write for book, get low prices today, sure.



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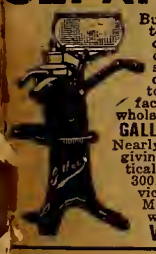
Wonderful Egg Producer

Any poultry raiser can easily double his profby doubling the egg production of his hens. scientific tonic has been discovered that realizes the flock and makes hens work all the e. The tonic is called "More Eggs." Give your s a few cents' worth of "More Eggs," and will be amazed and delighted with results. dollar's worth of "More Eggs" will double is year's production of eggs, so if you wish to y this great profit maker, write E. J. Reefer, oultry expert, 4038 Reefer Bldg., Kansas City, o., who will send you a season's supply of More Eggs" Tonic for $1.00 (prepaid). So nfident is Mr. Reefer of the results that a illion dollar bank guarantees, if you are not solutely satisfied, your dollar will be returned request and the "More Eggs" costs you thing. Send a dollar today or ask Mr. eefer—for his free poultry book that tells the perience of a man who has made a fortune out poultry.—Adv.

SAVE MONEY ON SEPARATORS



Buy direct from my factories, where I build the closest skimming, easiest cleaned, modern designed separators, from highest quality materials, and sell to you at lowest manufacturers' prices — less than wholesale. Right now I quote

GALLOWAY SPECIAL NEW LOW PRICES

Nearly 100,000 Galloway Sanitary Separators giving satisfaction everywhere. Four practical sizes. Also build engines and spreaders. 300,000 satisfied customers — some in your vicinity. Close shipping points save freight. My free catalog honestly describes Galloway goods. Get it before buying.

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POWERFUL AIR GUN AND 500 BUCK SHOTS

Big 31-inch lever-action rifle, fine walnut stock, free for selling 25 beautiful Pictures or 25 pkgs. Post Cards at 10c. Order your choice. **GATES MFG. CO. DEPT. 520 CHICAGO**

WONDERFUL PHONOGRAPH GIVEN TO YOU

The latest improvement — without the horn. The lightest, most durable and compact practical phonograph ever produced. It is beautifully finished, tone arm black japanned, nickel winding crank, accurately constructed, smooth running spring motor, which plays 2 to 3 records at one winding, speed regulator, stop lever and felt covered turn-table. New improved sound box with mica diaphragm, which makes perfect reproductions of all kinds of music—band pieces, talking pieces, instrumental, orchestra, vocal, &c., in a marvelous manner.

PLAYS ANY DISC RECORD

Up to 7 inches, and plays them properly. This machine is simply wonderful—not to be compared with any other of this kind. Will give you more entertainment than anything you ever owned. **Every machine Regulated and Tested before it leaves the factory** and guaranteed in every way. A real phonograph, not a toy, yet small and light enough to be carried to camps, excursions, etc. Gives a clearness and volume of tone not surpassed by most high-priced instruments, and

SEND NO MONEY you can obtain it without cost. Just your name, and we will send you 24 of our Art Pictures to dispose of on special offer at 25c each. Send us the $6 you collect and for your trouble we will send this new improved E. D. L. Phonograph and a selection of 6 records, free for your trouble. When you can dispose of pictures and earn this great machine in a few hours. **E. D. LIFE, 337 W. Madison St. 10-T-101, Chicago**

Butter or Sundaes?

By Florence L. Clark

"DO YOU sell as much butter substitute as you do butter?" the leading grocer in an Iowa town was asked. Butter was selling on that day at 55 cents, and the margarines at 30 to 35 cents in his store.

"As much?" the grocer exclaimed. "Why man, we sell nine pounds of margarine to every pound of butter!"

The man who had asked the question puzzled over the situation a moment and then said:

"But if people are only buying one pound in ten of butter, how can butter, even with the war, be so scarce as to be so high-priced?"

"Search me," the grocer answered. "I don't pretend to understand. I only know. Ask one of the farmers. Maybe they can tell you."

So the man who wanted to know hunted up the leading dairy farmer of the vicinity, who had a large herd of registered Jerseys, and put the question to him.

"Well," answered the dairyman, "I have just signed up for the season to deliver all my cream to an ice-cream factory instead of the creamery to which I have always sold. That's one reason."

"You're joking. Whether you sell to a creamery or an ice-cream factory can't make any difference in the butter market."

The Churns Forgotten

"Certainly not. But multiply me by thousands and it will make a difference. And that's what you should do, for thousands of the best dairies are now sending their butterfat, not to the butter churns, but to the ice-cream mixers. Sundaes are not the least of the reasons why butter is so scarce. Look at the growth of the soda-fountain business the last few years. Small towns that used to be proud to have one ice-cream "parlor," now have three or four. The smallest village has ice-cream cones for sale. It's a poor drug store that hasn't a soda fountain. The automobile does its share in boosting the business. Sundaes along the way in motor touring are a matter of course. The movie does its bit. Watch any movie crowd leave a theatre and see how many of them stop for a sundae on the way home. It would be interesting to know just how many of them who are thus treating themselves to a luxury are using margarines in the home because they can't afford to buy butter.

"There is another side to the proposition too. Dairy farmers everywhere will tell you nowadays that the ice-cream factories are canvassing the country for the products of the best dairies for ice cream. What remains goes to the creameries. Rather startling proposition—isn't it?—that the best should be going into luxuries and the second best into a necessity. And yet the health experts say that the children of the country must have butter."

After his talk with the dairy farmer the man who wanted to know, in a spirit of following the problem down to a conclusion, walked into the most popular refreshment place in the town and in the course of conversation with the proprietor casually inquired: "Are people buying less ice cream since the war?"

The proprietor gave a decided shake to his head. "I should say not. Business is better than it ever was."

Then the man who wanted to know decided he had heard enough, and he went home and thought about the war and how the American people were going to win it by saving food.

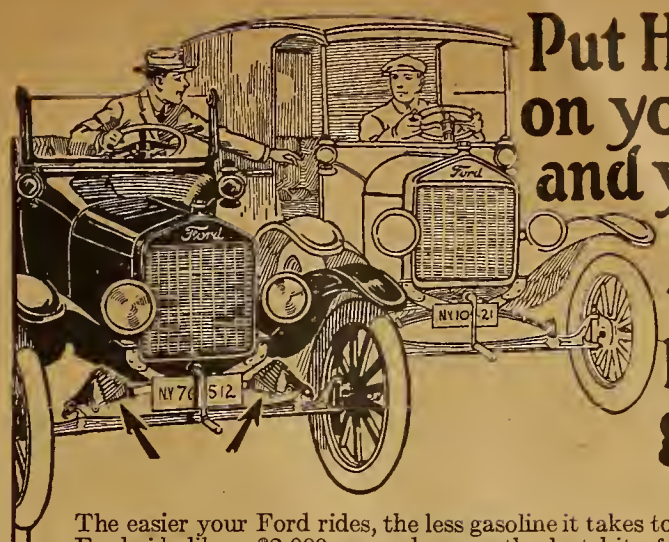
Eat Lots of Cheese

MEAT is a fighting food. Our boys at the front need lots of it. Cheese is a more forceful though more pacifically inclined article of diet. We ought to eat a great deal of cheese.

Don't let anyone defame cheese to you. Its food value is high, about half again as high as that of fresh beef. Its price is low as compared with other foods. Cheese contains in tabloid form nearly every element of nourishment the body needs.

The belief that cheese is indigestible is in most cases just a notion. Chew your cheese well and you will digest it easily. And you needn't have any prejudice against the odor thereof, either. Some of our best American-made cheeses are exceedingly mild in this respect.

Before the war the average American ate 170 pounds of expensive meats a year, and only four pounds of cheese. So with these facts before you, eat cheese.



Put HASSLERS on your Ford and you'll think someone plugged a hole in your gas tank

The easier your Ford rides, the less gasoline it takes to run it. Make your Ford ride like a $2,000 car and secure the last bit of power from every drop of gas. Install the

For FORD Cars **HASSLER** PATENTED **Shock Absorber** *For FORD Cars*

Hasslers enable you to save gas in two ways:

First, they make your Ford ride so smoothly it requires less power to run it.

Second, they enable you to take the roughest spots without shifting into low or changing speed.

Hasslers achieve economy by making your Ford *comfortable*. They stop all jolts and jars, decrease vibration, prevent sidesway and rebound, and make your Ford easier to steer and safer to drive. By doing this, they cut your expenses for gas, tires, up-keep, and increase the resale value of your car.

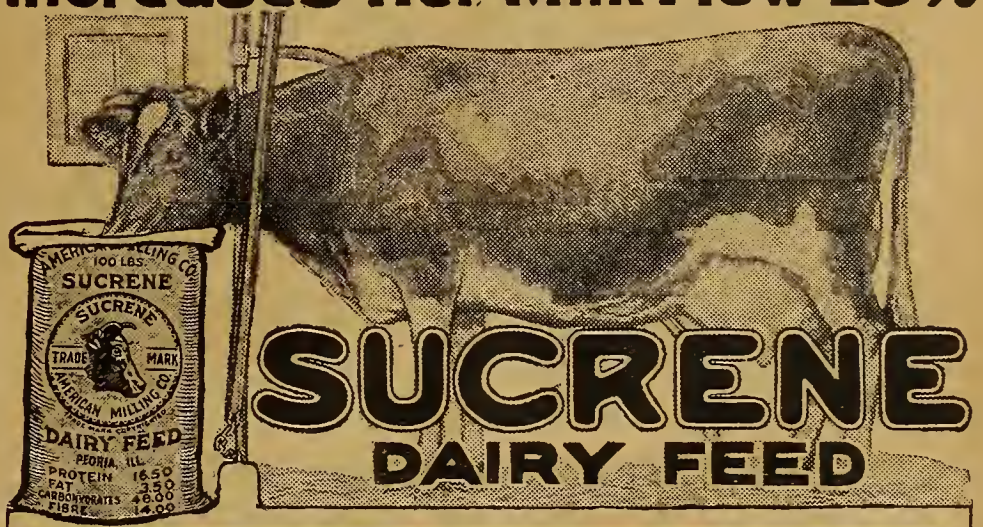
10-DAY FREE TRIAL OFFER

Write today for FREE TRIAL BLANK and we will have a set of Hasslers put on your Ford without a cent of expense to you. Try them 10 days. Then, if you are willing to do without them, they will be taken off without charge. Don't ride without Hasslers simply because someone discourages you from trying them. Accept this offer and see for yourself. *Nearly a million of the Patented Hasslers now in use.*

ROBERT H. HASSLER, Inc.

1804 Spruce Street Indianapolis, Indiana

The Poorest Milker You Own Increases Her Milk Flow 25%



SUCRENE DAIRY FEED

It Pays to Feed Your Cows a Complete, Correctly Balanced, Quality Guaranteed Ration

When a good milk cow is fed a full ration she turns half her feed into milk; when fed three-fourths of a ration she turns one-third her feed into milk; when fed half a ration she needs all her feed for body maintenance.

Sucrene Fed Cows Always Give More Milk Because They Are Properly Nourished

Sucrene Dairy Feed is a scientifically correct body maintaining and milk making ration. Its 16½% protein, 4½% fat and carbohydrates, and necessary ash and mineral matter, meet all the needs of the cow, every day, when fed only with the usual roughage. Composed of cottonseed meal, corn feed meal, corn distillers' dried grains and solubles, palm kernel meal, finely ground and bolted grain screenings, clipped oat by-product, calcium carbonate ½ per cent, salt ½ per cent.

Your cows will prefer Sucrene to any other feed because it is sweet smelling, appetizing, easily digestible, and because of its great variety of high grade feeding materials. Sucrene Feed is a complete ration as you buy it. You have no mixing to do—we have done that for you in the most perfect manner possible — merely vary the quantity in accordance with the cow's milk-producing capacity. Every sack guaranteed uniform high quality.

Reduce Cost of Milk Production

Sucrene Dairy Feed brings you more milk per dollar of feed money than any ordinary ration. It leaves your high priced grain to bring you a quick, direct profit in the market. It is an all year profit maker, keeps your cows in better producing condition summer and winter.

Order a ton from your dealer. If he can not supply you at once, write us and we will see that you are supplied. The coupon or a post card brings you free Illustrated Literature on care and feeding of farm animals. Write for it.

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Please send me illustrated literature on feeds checked below: (32)

- ☐ Sucrene Dairy Feed
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Furs Are Worth Big Money

Furs will be higher than they have ever been in the history of the fur business and the Abraham Fur Co. will again be the leaders in paying trappers more money for their furs than they can get from any other fur house in the World.

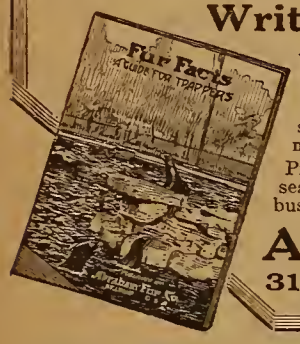
We were the only large fur house in the United States that made a gain in number of shipments received last year; all others showed a decline. Why? Because Trappers Everywhere Have Found Out That It Pays and Pays Big to Ship Furs to the Abraham Fur Co.

Anybody can tell you how high furs are but we will show you with real money now. Send us furs you have on hand.

For many years we have made a specialty of handling early caught furs and we can pay you a better price for this class of furs than ever before.

We will pay you more than you can get at home—more than you can get from any other fur house and more than you expect yourself—that's going some, but we are in a position to beat all price records for furs and we are going to do it.

Write for Our New Book Today



—the most complete catalogue of trapper's supplies carried by any house in the United States—quality of goods guaranteed to be as represented and prices the lowest possible. Most valuable information for trappers ever published—will show beginners how to be successful on the trap-line, giving rules and methods for trapping that never fail, contains information for old timers that will surprise them.

Pictures of a Herd of Seals in beautiful colors showing how the seal lives in his native state. Free to anyone interested in fur business. Write today.

Abraham Fur Company

310 Abraham Bldg. St. Louis, Mo.

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FOR Market Reports, Supply Catalogs, Trapper's Guide, Game Laws, Shipping Tags. FREE

Our new 3-in-1 book just off the press. Tells where, how and when to trap; old trappers' methods and secrets; pictures all principal fur-bearing animals; tells habits; best baits to use; how to prepare and pack furs for market. Also includes **Game Laws** and complete **Supply Catalog,** listing **lowest factory prices** on traps, guns, smokers, outfits, etc. Mailed FREE.

Get on the Funsten list to receive latest price-lists, market reports, throughout the season. We keep you posted on all price changes—no charge for this service. 500,000 trappers and traders ship to Funsten—the BIG HOUSE. Write today.

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International Fur Exchange
358 FUNSTEN BUILDING

St. Louis, Mo.

Biggest Check For Your Entire Pack FURS

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Ship Your Furs to

Standardized Grading—a Square Deal for You

Becker's system of grading does not change with every fluctuation of the market. Over 33 years of square dealing in grading—top-notch prices and prompt returns have inspired over 50,000 thoroughly satisfied trappers and shippers with absolute confidence in our way of doing business—and who ship to us regularly.

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Your Wits Against a Fox

By Mark M. Hollopeter

NO ONE would think of trying to dig potatoes in a cabbage patch, or husk corn in a hayfield. You would go where potatoes and corn were growing. No more is it possible to trap foxes in a locality where there are none. Study the signs, and be sure there are foxes in the township. Also remember that the fox is conceded to be the keenest and most wary of all our small fur-bearing animals.

Thus the trapper must use every precaution to keep the human scent away from his traps and bait.

There are several methods of trapping foxes, depending on the locality; but there are three ways which have yielded me the most pelts. These are the ash method, the chaff method, and the stump method. Secure a bushel or two of wood ashes and make them into a neat bed about four feet square, first making sure that your bed is in a fox runway or playground. In the center of the bed bury several old horseshoes, and smooth over neatly. Leave them there for a few days, for it is very likely Mr. Fox will pull them out several times in his investigations, and, thinking them harmless, he probably regards mussing up your ash bed as one of his regular evening pastimes.

Now is the time to change the horseshoes to traps, and our friend with the bushy tail discovers his mistake too late. Occasionally a fox will be too sly even to dig up the horseshoes, and then a little bait is necessary to lead him on.

When using chaff instead of ashes arrange the bed in the same way. It is also necessary to keep one eye on the weather, for a high wind will easily blow the chaff away and leave the traps exposed. On the other hand, chaff is lighter, and does not obstruct the jaws of the trap, nor hinder the action, which is often the case when ashes are used.

Fox lairs are most frequent in old woodlots and patches of scrub timber, and it is here that the stump method of trap-setting can be used to advantage. Find a stump with two large projecting roots, and place enough chaff between to cover your traps four or five inches. Secure a portion of the entrails of a pig or cow, and fasten close to the stump, and well down between the roots.

Place your traps out far enough so that the fox will be unable to reach across and grab the bait without getting caught. It is also a good plan to place several smaller traps out some distance from the stump, for the smell of the bait will attract many smaller animals, and you may catch several of them as well.

When I Sell by Parcel Post

By C. E. Davis

THE coming of parcel-post carriage found my name promptly listed in the directory ready to give the new plan of selling by mail direct to consumers a trial. Almost immediately came orders from far and near; but, alas, for my hopes! Practically every would-be customer insisted on prices lower than local dealers would allow me without the necessity on my part of considerable correspondence and packing and shipping.

I then tried another tack by advertising for customers, offering some specially fine beans for a stated price. I received 30 letters, a few of which contained a stamp, asking for detailed information. From these inquiries I secured 20 customers whose orders varied from a gallon to a bushel of dry beans. The beans were shipped in light, strong packages on which were pasted slips giving my name and address, net weight, and kind of contents, in addition to the name and address of the receiver.

This plan of using parcel-post service paid a reasonably good profit after expenses were taken care of. I am still selling considerable produce delivered in this way, and find that getting a start with satisfactory customers is the most difficult part of direct parcel-post selling. However, after a fair-minded person once learns that he can depend on getting what he asks for, the trick is turned, and you will have no trouble retaining him as a permanent customer.

TEN of the twenty million dollars paid to American fur trappers every year goes into the pockets of farmer boys. That is only one of the interesting facts told by A. R. Harding in "Chasing Fur Coats for a Living," in next month's magazine.

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The Why of the Sailor's Uniform

By Eugene Doane

WHY are the sailor's trousers so baggy? you ask. Well, there's a very good reason for it.

They are made that way to permit instant turning up of the trousers if decks have to be scrubbed or if a boat has to land through the surf. And the reason the trousers are so tight around the waist is because no expensive leather belt is needed to hold them up. Also, if you only knew, the double thickness just around the stomach keeps the men from catching cold and acquiring indigestion by the chilling of that very vital organ.

And, though you may not guess it, that broad, foolish-looking collar is made double and on a cold night watch it makes an almost perfect helmet by being tied at the corners with a bit of rope yarn and hauled over the head. And it is of course obvious that on hot days the flowing open collar is twice as comfortable as the soldier's high-necked blouse.

And, talking about that black silk neckerchief, let me tell you that if it is fastened on a boat stretcher or a mop-

His costume looks foolish, but there's a reason

handle, it makes a perfect wigwag signal flag good up to two miles. Or, if the man is wounded, it can be improvised into a fine tourniquet or into a sling for a broken arm. Oh, it's useful enough all right, and dressy as well.

And last of all is the round blue flat cap, so jaunty in its rakishness. The layman seems to think this isn't useful even as a head covering. But again he is mistaken. Time and again such caps have been used, in lieu of something better, to bail out water-logged small boats, while in an emergency the disk-like shape has made a perfect semaphore for signaling. No criticism ever is made of the round white working hats of the sailors, for their utility is so apparent that they have been adopted almost everywhere for sport use.

Mr. Skunk—Easy Mark

By Mark Smith

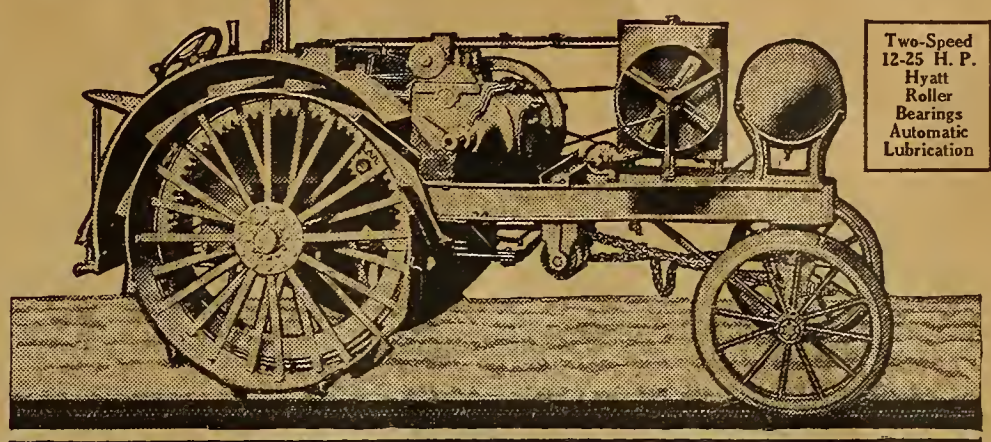
SKUNKS are easy to catch because they frequent such accessible places as old buildings, high banks of streams, and old fence rows, and aren't as trap-shy as many of the fur bearers.

Traps, staked or fastened to a drag, may be set at the entrance to dens and covered lightly with leaves or old grass. While there is no bait required for this set, it will of course increase the chances for a catch if a piece of meat is placed in the hole beyond the trap.

Another good set, where there are no dens, is to cover a piece of meat with a bed of chaff 1½ feet by 2 feet 3 inches deep. Place traps at the ends and sides.

WILLIAM HARPER DEAN, under the title of "The Night Siren," tells in next month's magazine why fourteen tons of bombs dropped into Paris at midnight by sixty Hun airplanes doesn't terrorize the French a bit.

Meets All Power Requirements



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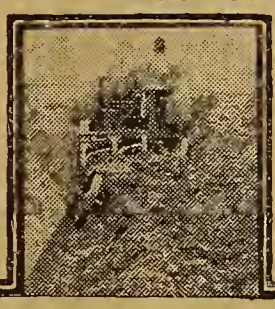
Geo. W. Brending, Milford, Ill., writes: "Your tractor has given complete satisfaction. I plowed seventy acres in eight days with a three-bottom John Deere Plow; did most of my discing with it, using two 18 in. wheel discs at all times. Kept close record of operating cost—$2 per day paid for all fuel and lubricating oil when doing a full day's work."



Chas. W. Carlson, Stromburg, Neb., writes: "Your tractor is O. K. It is cheap to operate—not more than two gallons kerosene to the acre, plowing good depth, with 3-bottom 14 in. John Deere Plow. Plowed old alfalfa, sod pasture, stock and stubble ground without trouble. I use the tractor to pull 28 in. thresher and thresh 33 loads of wheat to a barrel of kerosene."

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Address the Secretary, **THE RAW FUR MERCHANTS' ASSOCIATION,** 46 West 24th St., New York.

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Women War-Workers

While England's men make war, England's women make the crops to help that war along. American women, please note!

By the Wife of Private Peat

Photograph by Central News Photo Service

Princess Pat, daughter of the former Governor General of Canada, is working for Britain's war victims

Wisconsin girls, harvesting the potato crop, show that American women are also ready to do men's work

"WHAT man has done woman can do"—a new slogan this for the feminine world. A slogan, too, which men have recognized, and one which is not based on supposition, but founded on substantial and well-demonstrated facts.

A dozen times I am asked, "But what have the women done?" What have the women not done—that is rather the question.

Women are doing heavy work. There are women in the British Army, or, more correctly, attached to it: the Woman's Army Auxiliary Corps. There are thousands of them being called every week. They go to France. They do men's work. They wear suits nearly approaching the make of men's clothes. And they are very much women all the while.

They act as cooks at the camps—not on the firing line. Despite moving pictures of sensational scenes and strange tales from would-be heroes, no women are on the actual battlefield. Even nurses are some miles back of the line. Of course, women are in frequent danger from shell fire at long distance, as is every one. These women in France act as waitresses, as clerks, as dockhands, as truck and lorry drivers, army automobile chauffeurs, gardeners, carpenters—in fact, they are ready to do anything.

There are women attached to the navy on land—Women's Royal Naval Service, W. R. N. S.; "Wrens" for short, as the Jackies will have it. They wear a uniform of blue with a trifle of braiding, and work along the same lines as the W. A. A. C., though chiefly at docks and naval ports.

There are women police. They are women of education and refinement, who can exercise an infinity of tact and an abundance of patience. They wear the policeman's uniform, plus a skirt. They patrol the streets; they insinuate themselves cleverly among crowds of women gathered to welcome back wounded or men on short leave. They pick out "harpies" from the crowd with an unerring eye, and send them about their business.

Policewoman Makes Good

THE policewoman may be attached to a munition factory. Here she has an eagle eye on every worker. She is first, if unhurt herself, to aid the injured in time of an explosion. She is here, there, and everywhere, herding the workers to safety during an air raid.

There are the war-time women workers of the Y. M. C. A. and of the Y. W. C. A. There are the canteen workers, and there are the self-sacrificing, little known women and girls who volunteer to provide hot coffee and broth to police, to firemen, to wounded, and to Red Cross workers, when a night raid of hostile aircraft covers the darkened city.

There are the women who drive delivery vans, who shift heavy boxes and handle bundles of foodstuffs between store and retailer. There are women sweltering in bake houses, and women who tramp long miles to deliver his Majesty's mails. There are girl messengers and girl clerks. There are girls who sit long hours in government offices and girls who "carry on" in banks.

In this war the food question is a most vital one. The fighting man must be fed. He must have his breakfast, his dinner, and his supper at the appointed hours every day. The civilian man and woman must be fed and the munition worker must have the extra food necessary for the extra output of energy.

"The army moves on its stomach," said Napoleon. The modern army likewise moves on its stomach. Everywhere we see the slogan, "Food will win the war." By far the majority of persons who deal in foodstuffs the world over are women. They buy it, cook it, serve it. They consider its nourishing qualities and economize in its preparation.

Food conservation commences, however, not in the kitchen, not in the shop, not in the wholesale store, but on the farm. The first problem England faced for conserving her foodstuffs was the agricultural labor question.

"Raise more food, plant more ground, sow larger crops!" cried the conservator on paper. "We will," replied the farmer, "but first find us more labor."

That was what started the vast army of women farm laborers in the old country.

Don't for a moment suppose that people did not know before that women had done farm work. They knew, but did not realize. Now for the first time the woman farm laborer was recognized. For the first time she was on a scale of pay above the nominal. For the first time girls and women who had been born and reared in cities heard and answered the call "back to the land."

They made good. There were a few failures—girls who overestimated their strength and powers of endurance, girls who had previously viewed a farm through the rose-tinted pages of a summer novelette. But the majority stuck it out, worked hard, and gained the friendship of the farmer and his wife; gained for themselves added health; for the nation a greater vitality.

A society was formed, with headquarters in London and branches in every town bordering an agricultural district, where a prominent woman acted as registrar. She asked for volunteers for farm work. They were registered with an index of their capabilities, and called on as the pressure of the season advanced.

The farm workers were given an armlet of khaki, with an H appliquéd on it in red. This stood for Harvester. On graduating as a worker the girl was provided with overalls and heavy boots, or could obtain for herself an outfit calculated to stand the strain of heavy work.

Schools and model farms have been established by many persons of wealth, where the first crude ignorance of the volunteer is brushed off and a training given to the "farmeress." To some dairy work appeals, to others the handling of horses, and of the latter many are drafted as grooms into the remount departments of the army. Others find a fascination in farm machinery, and become expert on a reaper or in handling a motor-driven plow.

City Girls Work on Farms

VOLUNTEERS were also called for to help the overworked farmer's wife, as hired girl labor was almost an impossibility. These volunteers were trained and drafted; then came the housing problem. The hired man had lived with his wife and children in a cottage or with his parents. Casual labor had "dossed" in a room over the barn. Not so girl workers. The farmer and the farmer's wife had to unravel the puzzle of housing the new employees.

Notwithstanding the patriotic response of hundreds of British women to the land cry for help, the output in the old country had not entirely kept to normal. Along with this decrease in supplies goes the tremendous increase in population which England has experienced. There are the troops of many nations, and there are the refugees from all the devastated countries. The call for supplies crossed the Atlantic, and the appeal for food conservation reached the women of the States.

They have responded and will respond nobly. They have greater opportunities to conserve than the English women. Take, for instance, the case of fruit. Dozens of quarts of fruit could not be preserved in the old country because of the lack of sugar; the sourer varieties could not even be eaten. Rhubarb at one time rotted in the market.

Canning has been carried to a fine art in the States. It is part of the winning of the war to keep it up and increase the output. I know it is tiresome. I have picked the stalks from black currants in my day. But keep it up. The boys in the trenches—*your* boy—will return the quicker the harder you work.

If only every woman could realize that this war is not alone the war of the fighting man. It is *our* war. We are fighting too, in our own quiet, unobtrusive way. But our way is effective. It is half the battle. Let's keep it up.

Among the first of our unusual women workers were the conductors of public vehicles in New York. The drivers made an outcry to begin with, of course. They at the possibility of more than half the public vehicles withdrawing their service and the consequent unemployment for half the drivers, not yet called to fight, reason was seen. Woman donned the uniform, always plus a skirt, hung a badge and number on her coat, tucked her hair close under a peaked cap or slouched hat, learned how to punch a ticket and give change, and mounted the bus platform.

These women were mostly chosen from

Copyright by Underwood & Underwood, N. Y.

English girls who have replaced men on the farms receive instructions in the operation of a tractor

among the wives, daughters and widows, of the former conductors. They have all the wit and power of repartee of their male predecessors. For kind-heartedness and sympathy they are unsurpassed. They are friends to every wounded soldier. They help the cripple on and off with tender strength. Is not their own Bob, or Jack, or Tom "over there?" May not he some day be crippled and almost helpless?

Second to food conservation comes the conservation of our cash. Conserve cash, but do so with reason. Many of the women of Britain are better off to-day than ever before in their lives. Many are realizing ambitions, hopes, ideals, which they never thought to reach. The same will apply in the States when more women get into the industrial world.

I know of one woman in Glasgow who has three children, and her husband is fighting with a Scottish regiment on the western battle front. She receives something around $3.20 for herself as Government separation allowance each week. She gets almost a dollar a week for the first child, and about 60 cents a week for each of the other two. Her husband assigns her a portion of his 25 cents a day, which is his pay as a soldier in the Imperial Army. She receives half his previous wages of $6.50 a week as a tram conductor, and she occupies that very same position as conductor at the full $6.50, while she pays a relative to watch and care for the children. The eldest child is provided with meals, for a nominal sum, at the board school, and the very youngest, should occasion demand, can be left at the day nursery.

All this as against the $6.50 which kept them all in peace time, the $6.50 which clothed and fed the husband as well as the wife and children, and even allowed him a trifle pocket money.

Now she purchases extra comforts for the youngsters; she gives them better clothes and better food. She is making payments on a piano, the darling ambition of her Jim. This is to be a surprise for him, and so is the nest egg in the bank against the day he may come back crippled and unfit for strenuous work.

This is conservation, real conservation, of cash. Money spent and money saved to the good of the family and to the good of the nation.

And there is conservation of the children—another part of woman's war work. The working woman of Britain had a problem here. She solved it with the efficient help of a paternal government.

"We must have women workers."

Yes, assuredly.

"We must also preserve and conserve the children."

There came then, as though by magic, the munition factory *creche*, the day nursery, and the school dinners.

Women in munition factories, women at work in aërodromes, in naval dock yards, or army depots can now work in confidence that the "kiddies" are safe.

The women work, and trained nurses mind the babies. The babies play and grow. The babies drink specially good milk and breathe real fresh air. The babies are the backbone of the country.

This is conservation: the saving of the nation. It is not a conservation for the town dweller alone, but a conservation for the country person as well.

Conserve your food, conserve your cash, conserve the children. Help the fighting man, strengthen the hands of the Government, win the war and everlasting peace.

That is woman's task to-day, no matter where she may have her lot cast. The women of Britain and the women of France have realized it and gone to work with stout hearts and brave thoughts. The women of the States are almost in line.

"A TWO-HUNDRED-ACRE PATRIOT" is Fannie Klinck, woman farmer. She does not have to work for a living any more, but she tells why she does work, in December Farm and Fireside. Hers is a message to YOU if you're tired of helping win the war.

A Substitute Food Show

By Emily Rose Burt

THE Ladies' Aid Society was advertising a "Substitute Show," and everybody around town wondered what it could be. A small fee was charged for admission, but the nature of the affair was kept as secret as possible, though news did leak out that probably it had something to do with food.

This report was confirmed when visitors reached the inside of the hall, for there were four long white-covered tables filled with food placarded in this wise with big swinging signs: "Wheatless," "Meatless," "Sweetless," "Heatless."

The center of the "Wheatless" table was occupied by a big doll dressed to represent an ear of ripe corn. She wore a bewitching green crêpe paper cape open in front to show a golden yellow frock, and her silky corn-colored hair was topped by a tasseled cap.

Around "Miss Maize," as she was labeled, were displayed all sorts of appetizing dishes made from wheat substitutes. There was a pyramid of corn muffins, a tray of oatmeal cookies, rows of bran and oat meal and rye breads, rolls, cakes, pies, puddings of any wheat substitutes whatever—each one plainly tagged for all to read.

Every member of the society had contributed the results of her own successful substitute experiments, to make the exhibit educational and interesting.

The "Meatless" table had at one end as an attraction a flock of fluffy toy chicks within an encircling wire barrier trimmed with green vines.

A fisherman doll with a fishpole and a fish basket held sway at the other end of the table.

Egg dishes, fish in different guises, and casserole concoctions were in evidence. The idea of each dish was not necessarily original nor new, but the display of it was intended to call attention to the possibilities in the way of meat substitutes.

The "Sweetless" table was most popular of all—strictly speaking it should have been called the "Sugarless" table, for there were any number of "sweet" sugar substitutes.

The centerpiece was a darky doll labeled, "Ah'll be yoh honey."

Of course there were cakelets and cookies made with molasses or honey, or corn or maple syrup. There were candies and cake frostings combining the substitutes with fruits and nuts, as well as all kinds of stuffed date, fig, and prune confections.

A tower of popcorn balls was a spectacular feature of the table, and there were salted nuts and chocolate sweets besides.

The "Heatless" table displayed a comic doll wearing a cunning bathing suit and green rubber diving cap.

The purpose of the exhibit at the "Heatless" table was to recommend ways of cooking without fats and to suggest butter substitutes.

Dealers Donate Samples

This gave an opportunity for manufacturers of various oils and butter substitutes to co-operate, and some of them, as well as some local dealers, gladly did so by donating samples.

Some delicious-looking food in which butter substitutes had been used was offered for trial by taste, and illustrations of steaming, baking, and broiling instead of frying were there in the concrete. Potatoes, for instance, cooked appetizingly in a number of approved ways, made a notable showing.

Recipes for the various dainties could be obtained free at the respective tables, and at half-past nine in the evening all exhibits were sold or auctioned off.

The doll centerpieces were also put up for sale, and made four little girls happy.

During the evening at intervals some "substitute" songs were sung. A few of them were parodies, and others were such appropriate ones as "Oats, Peas, Beans, and Barley Grow," sung by little schoolgirls who circled as they sang; and "Way Down Yonder in the Corn Field," rendered by a pair of jolly boys who blacked up as minstrels and accompanied themselves on banjos.

Another original feature was a series of substitute Mother Goose melodies.

For instance, Little Miss Muffet appeared and spoke her piece. Boy Blue blew his horn to advertise the value of corn, and the Old Woman in the Shoe talked feelingly of feeding her children on barley bread.

The result of the Substitute Show was not only a good sum of money for the Ladies' Aid, but also new and widespread enthusiasm and information in regard to food conservation throughout the community.

No doubt the Food Administration would be glad to co-operate in such an exhibit with helpful literature and advice.

NOTE: A series of substitute Mother Goose Melodies will be sent on receipt of a stamped self-addressed envelope, by the Entertainment Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York, N. Y.

Victrola

The messenger of cheer

In homes throughout the land where the boys are absent in the service of Uncle Sam, the Victrola with its corps of noted artists is cheering the home-folks with its superb music and entertainment.

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The Victrola is the messenger of cheer whose inspiring music is so necessary in these stirring war times. During the coming holiday season, it will find its way into many additional homes. And many new Victrolas and Victor Records will be among the Christmas gifts to bring joy to the hearts of the soldier and sailor boys in camp.

Victors and Victrolas $12 to $950.

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Victor Talking Machine Co., Camden, N. J.

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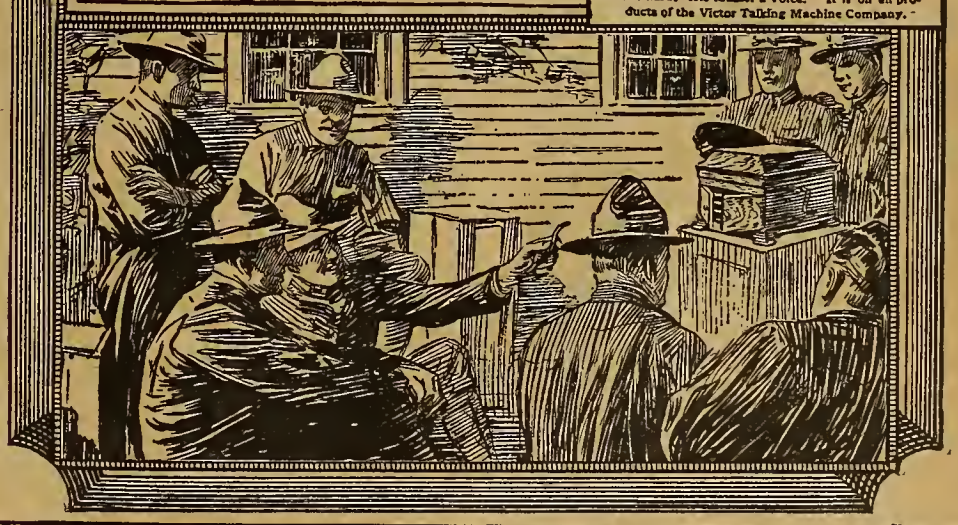
To insure Victor quality, always look for the famous trademark, "His Master's Voice." It is on all products of the Victor Talking Machine Company.



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Ask about Ro-San Washstand—Hot and Cold Running Water Without Plumbing.

Constable Rudd

[CONTINUED FROM PAGE 13]

considerable pleasure to the town bully in persecuting Rudd—if only to see in his eyes the flame of bitter hate and impotence. The impotence was Rabens' tonic. It was an unqualified tribute.

It was not until the morning after the election that Ernie Rudd believed the truth. He was summoned to take the oath, and the re-elected intendant of Karnak pinned on his narrow chest the star of office. Ernie Rudd gazed at that star, and some inkling of the power it represented seeped into his breast For the first time in his life Ernie Rudd was somebody.

He listened dazedly to the flowery speech of the oratorically inclined intendant, and did not heed the guffaws of the assembled citizens. Finally the speech was finished and Ernie was pressed for an answer.

This time he did not need to be hounded into talking. It was with a quaint, peculiar dignity that he faced the crowd, and, thanks to the star on his coat, he met men's eyes squarely.

"You fellers 'lected me constable as a joke. But I'm done 'lected, an' I got to serve. All I c'n say is that I'm gonna make you a good constable. I'm gonna see that there ain't no disorder in Karnak while I'm head of th' p'lice."

He spoke seriously, almost with force. A few of his hearers chuckled, and a few others stared at him, sensing that the Ernie Rudd who was talking to them was not the man they had known. The star on his rusty coat had already invested him with a certain firmness.

At eleven o'clock that morning the southbound Florida flyer hesitated at Karnak long enough to pick up Ernie Rudd. He made his way to a big arms company on King Street in Charleston; and there, after displaying his badge of office, he purchased a vicious .38-caliber six-shooter, a box of fifty cartridges, and a pair of handcuffs. Then he walked slouchily along St. Phillip Street to police headquarters, at the corner of Vanderhorst, where a cousin of his brother-in-law, who "pounded" a beat on the city streets, explained in detail the workings of the bracelets. At five o'clock Constable Rudd returned to Karnak.

He stood uncertainly on the station platform, serenely unconscious of the laughter of the operator and station agent, unhearing of the staccato click of the telegraph key. He stared straight ahead at the serried skyline of pinetops which marked the edge of the big marshy swamp. Sim Hawkins, crossing to Lively's general store for a half dozen bananas, waved a hand toward the little man.

"Hullo, Constable! How's the p'lice force this afternoon?"

Rudd did not answer.

HE WALKED slowly up the single street on either side of which were the frame structures which comprised Karnak's civic center: a half-dozen general stores, the crimson and tiny town hall, the big white office of the leading legal light, and the rambling, patchwork hotel. He seated himself on the low veranda which spanned the front of Simpson's place, tamped vile plug-cut in the bowl of his rank pipe, and puffed away. The Doc and a couple of loungers joined him, and then Dan Rabens strolled across the street from Carroll's blacksmith shop.

Nor was Dan Rabens' step quite steady. Somewhere, somehow, he had secured a bottle of that which "biteth like an adder," and there was an ugly gleam in his bloodshot eyes. He stumbled on the bottom step, which added to his ire. He leered contemptuously at the newly elected constable.

But Ernie Rudd did not quail at his approach. He merely did not see him; or, if he did, he gave no sign.

"How's th' constable?"

Rudd met Rabens' eyes steadily. Somehow he was able to look another man straight in the eyes now that he was entitled to wear the star of officialdom.

"Pretty good."

Rabens was inclined to be nasty.

"You're all puffed up with that star of yourn, ain't yuh?"

"Not so much. Only if I'm constable, I'm constable."

"An' who 'lected you, huh?"

"'Bout thirty-eight voters."

Somebody laughed, and Rabens flushed.

"I 'lected y'—that's whut! *I* did—y' get that?"

"Sure," answered Ernie mildly. "Sure, y' 'lected me much as anybody else."

"More!"

"A' right, have it y'r own way."

"Sure I'll have it my own way. I'll have everything my own way, an' Gawd help any little runt of a joke constable that tries to prevent. See?"

By way of answer Ernie Rudd rose quietly and entered the drug store, where he bought a plug of chewing tobacco. The new-found dignity sat oddly on his narrow, stooped shoulders. When he emerged from the store Rabens loomed up before him angrily.

"That goes as she lays, Ernie. I'll do whut I please in this town, an' th' man whut tries to stop me's likely to get into trouble."

"'S all right, Dan. I ain't lookin' f'r trouble with no one."

"Haw—you! Look f'r trouble? Trouble couldn't ketch you, that's whut."

ERNIE RUDD did not tremble at the menace in Rabens' tone. He was rather surprised at his sudden lack of fear. Perhaps it was because he had always been afraid of the law, because he had always respected its power as a sort of detached, impersonal, almighty and inexorable thing—and now he *was* the law. It is thus that a uniform can change a man overnight from a weak-kneed craven to one who bravely faces enemy fire.

Now as he raised his eyes to Rabens' the old light of fear had been supplanted by another light—that of cold, calculating scrutiny, as if measuring the possibilities of a potential atagonist. Ernie Rudd man and Ernie Rudd constable were proving themselves to be two separate and distinct individuals.

Rabens sensed that his bullying was not to bring forth the usual whining response, and slouched away up the street.

Ernie ate at the hotel that night, and he took the joking of the other men with a quiet dignity which impressed them subconsciously. For the first time in its history Karnak had elected a constable who did not feel himself above his job.

After dinner most of the men gathered in the parlor to play dominoes, others strolled to Simpson's and the depot. Ernie Rudd, however, sought the solitude of the veranda, and smoked contentedly to the raucous accompaniment of a thousand croaking frogs.

Meanwhile the Fates were conspiring to bring excitement to Karnak. Dan Rabens had taken sufficient liquor to become ugly, and then had fallen and broken the precious bottle. Nor had his attempts to get more whisky been successful. He slouched in the corner of Wright's general store and snarled nastily at every man who addressed him—and most of them gave him a wide berth.

There came into that store about eight-thirty a man from the swamps, a rather good-sized man named Cardigan. Bad blood had long existed between Dan Rabens and Cardigan. It had been engendered with the filing of a lawsuit involving title to a bit of property which Rabens claimed by adverse possession. And Cardigan made the mistake of trying to talk settlement with Rabens.

Rabens cursed Cardigan, cursed him vilely. Cardigan, hopelessly puny against Rabens' bulk, retorted in kind. And Rabens, demon-mad, reached for an ax handle and smashed Cardigan down. Two young men dashed affrightedly up the street, and they found Constable Rudd on the hotel veranda. Their story was told breathlessly, and at its conclusion Constable Rudd rose and hitched his belt tighter about the waist. He knocked the ashes from his pipe and pocketed it. He reached for his hat, which was lying beside his chair, and then turned slowly to the two young men.

"You trot along back an' tell Dan Rabens I'm a-comin' f'r him," he said calmly.

The young men gasped.

"Ye ain't! Ye'd better not, Ernie. He'll hurt ye, shore."

"You fellers do like I tol' you. Tell him I'm a-comin' for to arrest him. He's broke th' town law."

When they reached Wright's, a big crowd had gathered. The little store, rancid with tobacco smoke, was a-thrill with excitement. The young resident doctor was busily at work stitching the nasty cut on the side of Cardigan's head, and the assailant was standing belligerently, hands on hips, by the counter.

"Ernie Rudd says he's a-comin' to arrest ye, Dan."

Somebody laughed, but Dan Rabens shook his great frame and growled.

"Ye'd better warn him not to come in that there door, because sure as he does I'm a-goin' to hurt him."

"We tol' him, but he says he's a-comin'."

"If he does—"

The screen door swung back violently and Ernie Rudd stepped within the glare of the acetylene lights. He seemed very much at ease, but there was a cold light in his eyes. In his hand was a new blue-steel revolver. That revolver was pointed directly at Dan Rabens.

"Throw up your hands, Rabens."

Dan started forward in a fury, cursing horribly. Rudd's voice cut him short.

"Quick! You'll likely get hurt—hurt bad!"

Men stared at Rudd, Rabens among them. There was that in the little fellow's manner which betokened determination—iron, inflexible. Somebody spoke:

"I b'lieve th' dam' fool'd do it!"

"Quick now, Dan!"

Slowly, grudgingly, Rabens' hands climbed ceilingward.

"Ye'll be sorry for this, Ernie."

Rudd took a pair of new and shiny handcuffs from his pocket and tossed them to a man at the other end of the room.

"Slip those things on him—an' lemme hear 'em click!"

The man was slow in obeying, and for the fraction of an instant Rudd's new revolver was trained on him.

"I ain't aimin' to stand f'r no foolishness. Ye do whut I say or there'll be *real* trouble here—not no damn coward knocking over a smaller man."

The man with the handcuffs approached Rabens wheedlingly.

"Lemme slip 'em on, Dan. Ernie's plum drunk an' he's got a gun—"

"He'll let you put 'em on," interjected Rudd icily. "He's *got* to. Th' day when a big bully's gonna run Karnak is gone. Stick your hands out, Rabens."

The hands came out slowly.

"If you didn't have a gun, Ernie, I'd—I'd—"

"Ye'd *whut*?"

"Kill you."

"Sho' now! Y' ain't that bad, are yo Dan? I don't b'lieve a guy like you h enough nerve t' kill a frog."

"I don't go 'round gettin' th' drop o men without no guns. I've a good mind to—"

"You ain't got a good mind to do nothin' but let Harry put them handcuffs on yo Be quick now!"

THERE no longer remained a doubt as t who was master of the situation. Harry grumbled at his task and apologized pr fusely to Rabens; the big man swore vile and hurled vituperation at the little co stable, swearing dire things when he shou catch the man without his revolver. To of it Ernie Rudd turned a deaf ear. A then finally Dan Rabens was secure handcuffed—almost too securely, for t rings cut into his wrists.

Then Ernie Rudd laughed.

"Y'r a brave man, Dan Rabens—a awful brave man."

"If I was free—"

"But you ain't."

Ernie Rudd stepped over to the count On the counter he placed his revolv Then he produced a small red box, the se of which he broke with elaborate care. T box contained fifty cartridges.

Very quietly he selected six. He br his new revolver and placed the six cartrid in the six empty chambers. Then he fa the assemblage.

"Jest did that, fellers, in case any *reg'l* trouble happened to bust loose. Co along, Dan!"

IN THESE pages next month we'll back to the days when there was no r time, no jazz band and no fox-trot, a look over the mushy-sentimental son like "The Curse of an Aching Heart" "The Cruel Hiss" we used to "rend" touchingly. Pictures of the folks w sang them most successfully will be show under the general title of "There Are Songs Like the Old Songs."

What About Measles?

By Charles H. Lerrigo, M. D.

THIS is what Private Casey wrote home to his mother:

"DEAR MOTHER: It ain't any good complainin' I don't write home no news. The news this camp ain't got is something remarkable. How's it to get any? All we see and all we know is measles. We been in quarantine now for just thirty-six days. Fast as one lot gets well, down comes another. This is the measliest barracks in all this measly camp.

"We don't have to go to the base hospital, cause they're so full up they won't take no more measles cases. They put us in an empty barracks, and, you believe me, they was 180 of us in there at one time, and it sure was some spotted crowd. Jim Fisk has the red measles, but his brother Dick is pretty low with black ones. Sammy Fergus is gettin' off pretty easy with secondary measles, and I'm just up from the straight, plain kind.

"Jack Black has got measles complicated by pneumonia, and so has Reddy Fair.

"Fred Best has measles with a running ear, and Simp has 'em so he can't see out of his eyes. It all started with Dutchy Blum. He had 'em first, and we believe now that the kind he had was German measles (just over from Berlin), and if ever we get out we're goin' to beat him up for it. But then, we ain't never goin' to get out the way things is goin'. I have writ a poem about it:

"Of all the smelly animals
The rats and skunks and weasles,
The rottenest is Dutchy Blum,
Who started us on measles.

"So no more at present until maybe I can get myself put in the guardhouse or some place out of here where they is a little excitement and not all measles.

"Your son,
"THOMAS."

This letter is too long to print just for fun. It happens to be very largely true, and it presents the new measles problem that has arisen since our men have been gathered into army camps.

What about measles?

Would not these young men have been much better off if they had been exposed to the disease as little children and been safely over it before entering the army? Where is the sense in protecting children so carefully from the disease during a period of life when they might be cared for at home by a watchful mother, only to have them succumb to it when they are engaged in important duties from which they cannot well be spared, and so situated that the attention that they can receive is necessarily limited. These are the questions that are coming from thinking parents. As one expressed it: "We did Uncle Sam small service when we carefully protected our boys during their childhood from a disease that now keeps them from duty when they are urgently needed."

Very well. Let us consider the matter and find the best age to expose them and get them over it.

Several years ago Dr. Frederic S. Crum made some extensive observations at Aberdeen, Scotland. He found that of every 1,000 children under a year old having measles 140 died. At one year, out of every thousand attacked 109 died. At two years a remarkable improvement occurred, for only 36 died. At three years this was reduced to 15 deaths for every 1,000 cases. At four years it went down to nine, and five years as low as seven. This was not the best, however, for at nine years of age there were only three deaths to the thousand cases.

It is easy to draw two definite conclusions from these figures, the most pointed being that measles is a terrible disease for a young child to contract, and that the older the child the brighter his chance of recovery. Certainly no one would think of exposing a child under nine years to the disease, in the light of these statistics.

But how about children of nine years old and over? Shall we gather such children together at some convenient season, such as a vacation period, and send among them a patient in the infective stage of measles so that they may all have the disease and be done with it?

One moment. Before you contribute your child to that group, stop to consider that measles is a deadly disease. Eight thousand people die of it, in the United States alone, every year. Of every hundred deaths that occur, one is from measles. Are you willing to run the risk?

Of course you are not. So you will get a great deal of consolation from knowing that Col. Edward L. Munson, of the Medical Corps of the United States Army, a man whose observation and experience entitle him to speak, believes that measles is a disease that may be controlled and prevented. An epidemic of measles among the soldiers at Camp Wilson, San Antonio, Texas, inspired Colonel Munson to make the most extensive study of measles in medical history.

Colonel Munson believes that close housing and tenting is responsible both for the spread and the severity of measles. It is his conviction that fresh air and sunshine are its two greatest antagonists.

This is particularly interesting to a country doctor who has watched the solicitude with which the average mother tries to shut away every breath of fresh air from the room of the measles patient. I have always insisted that measles makes a quicker and better recovery when treated in a room with windows opened wide; and there are good and sufficient reasons to sustain my belief. The successful overcoming of measles requires that the blood and entire system shall be freed from the poison engendered by the disease. Sunlight in the patient's room and unlimited fresh air constantly entering his lungs are the most helpful agencies to enable him to throw off the poison from his system. If the patient is compelled to continue breathing poluted air teeming with disease germs, the effects of other favorable influences will be largely annulled, and he must wear out the debilitating effects of the disease; or the reverse may prove true—his vitality may be worn out first and his life unnecessarily forfeited.

Now I am going to tell you how to treat measles, because it is a disease in which medicine counts for little or nothing, and you can take care of the patient with very little medical assistance. But do not for this reason make the mistake of thinking it a trifling disease. Eight thousand deaths per annum in this country alone warrant no such idea.

Begin treatment early. If measles is around and your child shows symptoms of a cold in the head with a little fever, remember that measles starts that way, and keep him home from school and put him to bed. If you wait until the rash appears you will have had a sick child going around during the most dangerous period for four days. Don't forget that measles is most contagious in that "bad cold" stage.

Keep the patient in bed. Every disease accompanied by fever calls for rest in bed. It is especially important in measles because of the need to avoid chilling the skin.

Don't try to force the rash out. The rash will appear in due time without forcing, usually about four days after the beginning of the [CONTINUED ON PAGE 37]

The Chance Your Child Has to Live if He Gets Measles

DR. FREDERIC S. CRUM made some very extensive observations of children having measles. Here is what he found: That out of every 1,000 children under one year old having measles 140 died; at one year 109 died; at two years 36 died; at three years, 15; at four years, 9; at five years, 7; and at nine years 3 died.

It is easy to draw two very definite conclusions from these figures: That measles is a terrible disease, and that the older the child the brighter the chance of recovery. Certainly no one would think of exposing a child under nine years old to measles in the light of these statistics.

THE PRESENT line of **International Engines** gives every farmer a chance to buy the very engine he needs at a price he can well afford to pay.

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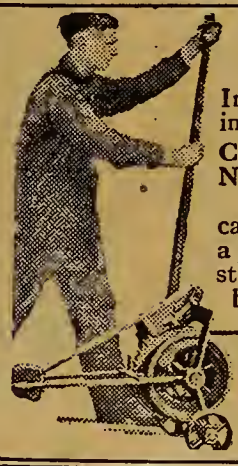

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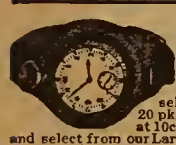

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Feeding Your Baby

The miraculous growth of Baby during the first year cannot be accomplished without the aid of proper food and fresh air

By Helen Johnson Keyes

THERE is an old proverb which tells us truly: "It is never too late to learn." The present generation, which has been called the age of the child, has invented a new saying: "It is never too soon to begin." This is more than a proverb: it is a solemn warning when it refers to the preparation of human beings for life.

We must begin to lay up health and strength and moral character in our children just as soon as they are born. It has been proved that badly fed, poorly cared for babies seldom make up entirely in later years for their unfortunate beginning. They seldom become as large, as strong, as capable of recovering from diseases as the children who have been well nourished in infancy.

For this reason we must always remember in our care of little ones that babyhood is a period when health and strength are stored up, not only for present needs, but for future use as well. When we give them faithful and intelligent care, not only are we making them fat, jolly babies, but are also putting in their bodies materials which will go on producing, giving us, next, healthy children, and, at last, robust men and women.

Have you ever thought about how much we accomplish in our first year of life? Never again, so long as we live, do we do so much in a twelvemonth. During that first year we almost treble our birth weight; we add about nine inches to our height, five inches to our chest, and four to the circumference of our head. We acquire six teeth; we learn locomotion on four feet and to stand on two, with some help from a chair or a friendly hand. Born almost blind, that is with sight which distinguishes only patches of light and shadow, by the end of that first year we have selected our favorite friends and can pick them out by their faces and may even begin to call them by name.

Our hands, which until between the third and fourth month could not reach out accurately to take hold of a desired object, are then quite capable of seizing the inkstand or the prettiest cup and dashing it into artistic fragments at our feet.

The baby's body, which looks so quiet and at rest, in reality is running a breathless race. How necessary it is that the mother should give the very best food and the very best care to the little body and mind which are performing these miracles of growth!

Some women do not wish to nurse their babies, because it "ties them down." We will admit honestly that it does do this—that it interrupts both work and play, that it saps the strength for the time being, and produces an almost constant state of hunger which must be satisfied by hearty meals of the right kind of food and drinks of milk in between.

If the only reason for nursing an infant were the sentimental one, the sweetness of the little face cuddled against one's breast, the clutch of the rosy hand, the gurgles of contentment so close to one's ear—if these were the only arguments for breast feeding, good reasons might occur frequently for giving bottles instead. But, as a matter of fact, the strongest argument for breast feeding is *not* the sentimental one, but the fact that artificial feeding actually reduces the chances of the baby's living.

Figures accurately collected in rural districts in different parts of the country show that there are from two to five times as many deaths among babies who are artificially fed before the ninth month as among those who are breast fed until that age. We must add to this fact a second truth: that those who do live despite not receiving their normal food, yet grow up weaker and less capable of recovering from the illnesses which attack childhood than those who have drawn health from their mothers' breasts.

The argument is certainly convincing, then, to every loving mother, and the only exceptions to it lie in those cases where the breast milk is not what it should be in quality or quantity.

No woman suffering from tuberculosis, cancer, venereal disease, or any contagious malady, or who has become pregnant again, should nurse her infant. In the first three cases the child should never be put to the breast; in the other cases it should be weaned as soon as the condition is known.

There are instances, too, when, although no disease or special condition is present to explain it, the milk is yet of a poor quality. Sometimes this may be corrected by changing the mother's diet, giving her a large supply of milk, cream, eggs, butter, cereals,

The mother of three robust youngsters tells you how to keep your baby well and strong

and cutting out fried foods, sweets, and pickles, which, even if the quality of milk is all that can be desired, are yet poor feeding for a nursing mother.

In these cases it is always worth while to try what can be done to improve the milk by nourishing food and a great deal of fresh air, but if the baby continues to show signs of indigestion, and if he fails to gain in weight, he, too, must be put upon a bottle.

Baby specialists have labored to produce a "modification" of cow's milk or some other artificial food which is an exact copy of mother's milk, but they have never been able to combine in the same proportions those elements of nourishment which God has supplied for the human baby. The nearest approach to it is cow's milk modified (diluted) with boiled water and sugar.

This is far better than any patent food, although some of these latter may be used to advantage in certain illnesses or during travels when fresh milk cannot be secured. Their steady employment often produces fat babies, but not always strong and healthy ones. The reason may become clear to anyone who studies the needs of the baby's stomach and then compares them with the food elements contained in one after another of these prepared foods.

We wish it were otherwise, for the use of cow's milk spells a great deal of care. Milk which stands in warm temperatures rapidly develops poisonous germs which, introduced into an infant's stomach, produce serious or fatal disorders. This is the reason why the hot weather brings so much illness to babies. You will find that there is not much hot-weather sickness among those who nurse, for a mother's milk cannot become sour or stale. But on the farm, where ice is hard to get, the summer season becomes a time of danger to the bottle baby.

Morever, milk is very easily infected by certain germs, particularly so by those of tuberculosis and typhoid. If the cows are tubercular their milk spreads the disease among those who drink it; if the milker is dirty or diseased the dirt and the germs will pass from his hands to the body of the cow and to the milk containers, from which the milk will pick them up and pass them on. Therefore, milk which we give to babies must be pasteurized. This is a process of cooking which, if properly performed, will not make the milk more difficult to digest and which will kill the germs.

Babies who are properly fed do not have colic. Perhaps you believe that it is impossible to get a child through infancy without experiencing those agonizing hours when the little legs are drawn up in pain and heart-cries rend our hearts. But I assure you that if you find the right food and give it regularly at stated intervals you will escape them. If, on the contrary, you pour milk constantly into the stomach, allowing it no rest, it will cry out in protest. The stomach must have a period of rest between its tasks.

During the first twenty-four hours of life an infant should have no food, but only boiled water, not sweetened, and cooled to body temperature. The second day he may be put to the breast every four hours, taking one feeding at one breast and the next at the other. After this let him nurse every three hours—always at alternate breasts—from six in the morning till nine in the evening.

Until he is three months old he will need a feeding at two in the morning, but after this age he can be trained to go without food from nine in the evening till the next morning at six o'clock. *He must be waked for his feedings.* This is very important, and after a few days you will find that he wakes himself for them and sleeps soundly between meals. After he has had food, always lay him down very gently where there is plenty of ventilation without a draft, and, having made him dry and just comfortably warm, insist upon his sleeping. Do not pick him up if he cries, but teach him that after his food comes a long sleep. He will learn the lesson quickly.

Directions will be supplied for making formulas of cow's milk for different ages, for pasteurization of milk, and for the care of bottles and nipples upon request and receipt of a self-addressed stamped envelope sent to Mrs. Keyes, in care of FARM AND FIRESIDE, Springfield, Fourth Avenue, New York City. Mrs. Keyes will be glad to answer by personal letter any inquiries regarding the care and health of children.

This is the first of a series of articles by Mrs. Keyes on the care of babies. The second will appear in an early issue.

A Long-Lived Light

By Mrs. Hayes Bigelow

A FRIEND showed me a unique lamp which she used in her baby's room at night. It was a queer-looking affair, but she asserted it was the handiest article in her house.

It looked as if a small-sized olive bottle about six inches high and an inch in diameter, was the foundation. This was two-thirds full of the best olive oil, which had been heated thoroughly for fifteen minutes and into this was dropped a piece of phosphorous about the size of a bean. The bottle was corked tight.

After three or four months, when the light began to get a bit dim, the bottle was uncorked so oxygen could get in. As phosphorous is poisonous and will burn the skin, great care must be used in handling it.

The Mystery at Glen Cove

[CONTINUED FROM PAGE 14]

"But whose, and of what possible value to us, I am not, my dear sir, enough of a necromancer to guess."

"Be reasonable, Jimmy," he pleaded. "When you're in total darkness you should not sneer at even an extraordinarliy small light. This is the only clue and—"

"So you call that a clue?"

"Why not? Here, indisputably, we have a telephone number. The exchange leads me to believe it is in New York. Of course, it may be nothing but a wild and aimless chase, but certainly a poor clue is better than none at all. It would be foolish not to squeeze it dry. And besides, you see"—his voice grew gentle, and a far-away look came into his eyes—"it isn't merely that I want to find the person or persons unknown who did for Carter. You mustn't forget that Mrs. Brandt is in this too. I have a feeling that somehow she is entangled in something dreadful. It's a feeling I can't get away from. I—I—oh, hang it, it may sound silly, but—well, I—I—have a hunch that she needs me!"

"You are absurdly romantic!" I snapped.

I made preparations to rise, and when my companion discovered that I was in no immediate danger of becoming a charge on his hands he ordered breakfast, which we ate hurriedly.

"They have eight hours' start of us as it is," he growled, gulping his coffee. "When we find the nest we may find no birds in it."

It was a trifle after six o'clock when we finished our breakfast and went downstairs to the office of the little tavern. I scarcely expected to find anyone besides ourselves astir at such an hour, but to my surprise there were two men standing at the desk, in conversation with the clerk.

As we descended I saw them turn and bestow upon us a very thorough stare. Their scrutiny suggested a kind of hostility, the sort of look that one associates with animals stalking their prey. It made me distinctly uncomfortable.

Nothing resulted, however, from this mysterious incident. We caught an early train for the city, and settled ourselves comfortably in our seats with the morning newspapers. Naturally there was only one thing which interested us, and with one accord we turned the sheets hurriedly. To our mutual relief there was no mention of the affair at the Debretts'.

"Thank heaven, they've kept it out of the press!"

"Don't be too confident," said Steele pessimistically. "Those news hounds of Park Row have sharp noses."

A thought struck me.

"By George! Those two chaps at the tavern this morning. Perhaps . . . ?"

"Not unlikely. They weren't mere barflys, that's a cinch. There was something about the way they stared at us—"

"You noticed it too?"

"Sure."

WE RELAPSED into silence. I gazed from the window for a while and then my eye fell upon a mirror set in the wall at my elbow. I could scarcely restrain a cry at what I saw. I forced myself, however, to sit perfectly still, and to give no evidence that I had seen anything.

I nudged my companion.

"Don't make a move," I cautioned, endeavoring to whisper without moving my lips. Then a better idea occurred to me, and on the back of an old envelope I wrote the message I had to convey:

We are followed—the two chaps we saw in the hotel this morning.

I watched Steele closely as he read this astounding intelligence, and my chagrin can be imagined when he turned and grinned without concealment.

For reply I wrote him another note:

Go back for a drink. On the way observe the occupants of the seat second back and across the aisle.

Again he grinned, but when I glared my annoyance at his obtuseness he rose to obey my suggestion.

It seemed a long time before my companion returned. When he did he sank into his seat with every appearance of nonchalance, but his fingers, as he fumbled with his pencil, trembled perceptibly.

You win. In a few minutes go back yourself. Watch your chance and slip into the next car. Drop off at Harlem. I'll meet you in the tobacco shop with the green blinds, a few doors east of the station, on 125th. Whatever you do, don't let those fellows pick up your trail.

Five minutes later I did as he had directed. I slipped into the car behind and took a seat toward the rear, waiting expectantly. In a moment the door at the forward end opened and one of the two strangers entered. He surveyed the car carelessly for a moment, and then seated himself. Not a doubt was left—we were under surveillance.

At Harlem I sat perfectly still until I heard the cough of the engine, preliminary to starting. Then I leaped from the train and sped down the stairway to the street. I was fortunate enough to find a street car just getting under way, and I jumped for the step.

After a few blocks I left the car and walked back to the tobacco shop with the green shutters.

I purchased a cigar and, endeavoring to convey an impression of casualness to the proprietor and his customers, sat down to wait for my companion.

When my cigar was finished and he had not yet arrived, I began to wonder. At the end of an hour I was distinctly alarmed. I fell to pacing to and fro in a nervousness I could not conceal.

ABOUT half an hour later, the morning being then well advanced, the proprietor of the little shop came toward me, scrutinized me narrowly, and coughed with a certain diffidence.

"I think you're wanted at the telephone," was his surprising intelligence. "The part said he didn't know your name, but he was sure you were here. D'ye think it's you he wants?"

Almost at a bound I was at the telephone.

"Hello!" I cried huskily. "To whom did you wish to speak?"

"A stout old duffer with a scratch on his nose, who's been biting his finger nails for the past two hours," came a strangely muffled voice over the wire.

"Steele?" I gasped.

"Sure. Listen, Jimmy! Can you hear me?"

"Yes."

"Good. Now get this: I've been treed. Our two friends are great little sleuths; they're out in front now. I've been doing a bit of trailing myself, and I'm in an apartment house on Sixty-fifth street, just off Park Avenue, 1846 Bryant. Get me?"

"Perfectly. Go on." My nerves were as taut as fiddle strings.

"The name of the place is the Trevonia. Beat it up here as fast as you can, but don't come in the front way. There's a passage directly back on Sixty-fourth, and by climbing over a low wall you can reach the Trevonia. I've arranged to have a colored man bring you to me. Is that all straight, Jimmy?"

"Absolutely. But I—"

"Don't ask me any questions now. Only hurry here. I don't know how long those wolfhounds will stay quiet. Good-bye."

Followed by the curious stares of the loungers in the shop I dashed out and hailed a fortunately passing taxi. In fifteen minutes I had reached Sixty-fourth and Park Avenue. I discovered the passage without any difficulty and slipped into its dark depths.

Just past the low wall I encountered a very awed and silent young negro, who conducted me through the labyrinthine passages of the cellar and up into the lobby.

I found Steele waiting for me beside the telephone switchboard. A quick, hard pressure of the hand expressed our relief at finding each other.

On the fourth floor, before the door of the apartment which was our goal, my companion seized me by the arm, and bored me with those hard gray eyes of his.

"Understand this, Jimmy: If it comes to a show-down, a choice between sticking by me and getting to the bottom of the whole darn thing, there's only one thing for you to do—"

"And that is?"

"*Go on with it.*"

"Then you have an idea that—"

"None whatever. I have no more notion of what's on the other side of that door than you have. That's why I want you to understand before it's too late that, if you're in this to help me, you're in to help Mrs. Brandt. In other words, if anything should happen to put me out you'll make a getaway, anyhow." [CONTINUED ON PAGE 37]

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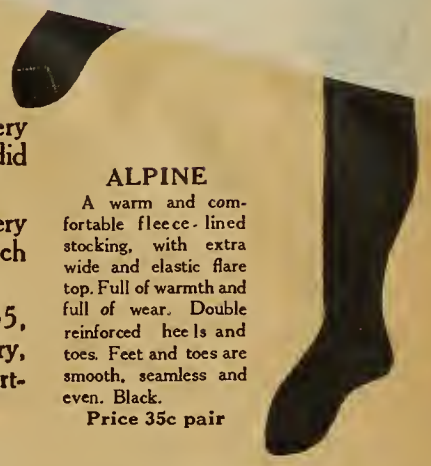

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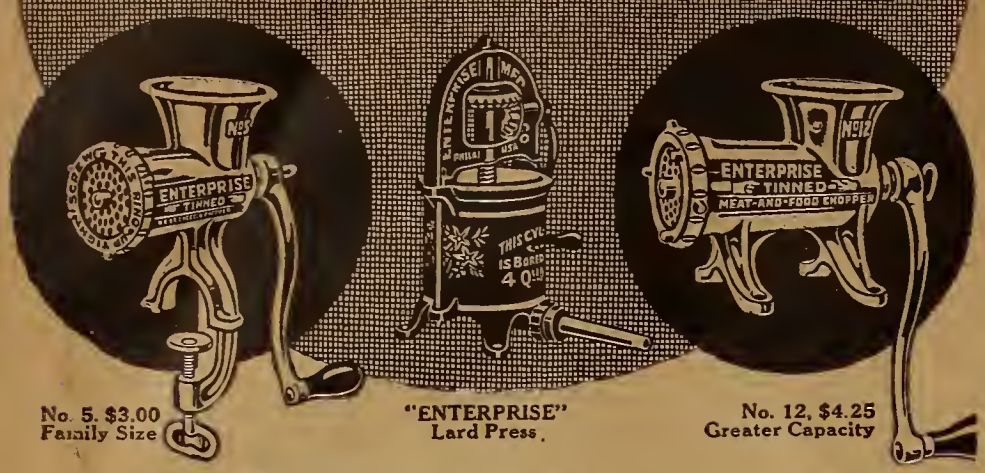

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Patriotic Puddings

By L. M. Thornton

POPCORN PUDDING—Grind two cups popcorn, add three cups milk, three beaten eggs, one-half cup brown sugar, one tablespoon butter, and a little salt. Let stand three hours in a moderately warm place, mix thoroughly, and bake in a slow oven until firm. Serve with cream or a syrup.

SIMPLICITY PUDDING—Soak slices of bread in hot milk until soft, and mash fine with a fork. Add the beaten yolks of two eggs, one tablespoon sugar, a seasoning of salt, and a teaspoon of vanilla. Bake in a slow oven until firm. Over the top put a layer of jelly or some rich preserve, and over this the beaten whites of the eggs. Set in oven until slightly brown and serve.

DUTCH PUDDING—Beat together one egg and one-half cup molasses. Add one cup raisins, one tablespoon butter, one-half cup sour milk, one teaspoon soda, and two cups of flour. Steam one and one-half hours.

STEAMED CRUMB PUDDING—To two cups bread crumbs add one cup molasses, one cup sweet milk, one-half cup chopped raisins, one beaten egg, one teaspoon soda, one teaspoon cinnamon, one-half teaspoon cloves, and one cup of flour. Steam one hour.

STEAMED GRAHAM PUDDING—One egg, one cup molasses, one-half cup milk, one and one-half cups of graham flour, one-half teaspoon soda, one cupful of seeded raisins, one teaspoon powdered cinnamon, one-half teaspoon cloves, and two tablespoons butter. Beat the egg, add the liquids, flour in which the soda has been sifted, fruit, spices, and melted butter. Pour into buttered baking-powder tins, and steam for four hours. Serve with lemon sauce.

PUMPKIN BREAD—One quart buttermilk, two eggs well beaten, one teaspoon soda, one tablespoon salt, two cups stewed and strained pumpkin, and cornmeal to make a rather stiff batter. Bake in a well-greased pan. Just try this delicious bread, while it is hot, with some good yellow butter and a cup of coffee.

HONEY-COMB PUDDING—To one cup molasses add one-half cup of butter, one cup raisins, one cup sweet milk, one-half teaspoon soda, and two and one half cups of flour. Steam three hours.

PUDDING SAUCE—Mix together one cup strained honey, one-fourth cup water, one tablespoon olive oil, one-fourth teaspoon each of cinnamon and salt, two tablespoons vinegar or lemon juice, and a dust of nutmeg. Boil ten minutes.

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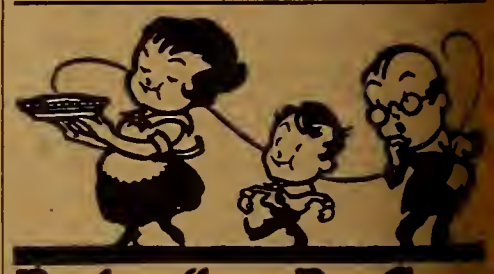

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The Mystery at Glen Cove

[CONTINUED FROM PAGE 35]

"I see." I smiled inwardly at the irony of his complacent assumption that I was risking my health, if not my skin, for the precious Mrs. Brandt. I gave no outward evidence, however, of my real feelings.

"Is it understood?" he demanded.

It was impossible to deny compliance before the appeal in Steele's anxious eyes. I nodded.

"Good old Jimmy!" he exclaimed, grasping my hand. Then he turned to the doorway, and rang the bell confidently.

A moment later a maid opened it, and Steele, without waiting for an invitation, stepped inside. She stared at him in apprehensive inquiry. For a moment he seemed to forget her presence. His eye was flitting through as much of the apartment as could be seen from the tiny reception hall. Suddenly I saw him start, in a movement instantly repressed. Then he turned to the maid with a disarming smile.

"We are from the building department," he explained glibly. "Inspectors, you know. The fire escape leads from that room yonder, does it not?"

"No," she replied, still suspicious. "It—"

"Oh, yes; to be sure. We are considering some changes. May I step in there for a moment to take some measurements?"

He turned to me: "Johnson, take the angles of that bay, will you? I'm going to have a look at some of these other windows."

He disappeared into one of the other rooms, leading off the hall, and the maid, after a dubious survey of me, with the apparent conclusion that I was less to be feared than my companion, followed after him.

Left to myself, I sat down for a comfortable smoke. I was, it had to be admitted, extremely tired. I had scarcely composed myself, however, and lighted my cigar, when I heard the sound of a woman's muffled scream, followed by the rush of hurrying feet.

The door flew open, and the little maid stumbled in, sobbing wildly and wringing her hands. Immediately behind her came Steele. His face was a little pale, and his jaw was set as hard as stone.

"What's happened?" I cried breathlessly.

"I wish I knew," was the surprising response. "All I know is that in that bedroom yonder I found a man, whom this girl swears she never saw before, lying in a stupor. I couldn't rouse him, and I smelt something very like chloroform."

"Where are the owners of the apartment?" was my obvious inquiry.

"Having a little vacation down at Asbury. The girl says she thought she was alone, and she hasn't an idea who this chap is or what's happened to him."

"A case of suicide?"

"I think not. In the first place, he's not dead, nor near it. And in the second, I can't find a trace of the chloroform. No, one thing's reasonably certain—someone else gave him the dope."

"But—where does he fit in?"

"I don't know—not yet, at any rate. But—"

"I suppose the next thing, then, is to find these Durdeen people?"

Steele nodded and turned toward the sniffling girl.

"When will—?" he began. A look flashed suddenly into his face that I could not understand, and he stopped short. His eyes were fastened on something down the hall which from my position I could not see. I caught the sound of a door closing.

THE expression on my companion's face was one of candid bewilderment, not unmixed with apprehension. Then, abruptly, it changed. The lines of the jaw grew taut, and the eyes burned with a look of pugnacity. His eyes still fastened on the hall, he beckoned to me.

"Jimmy," he commanded in a sharp whisper, "no questions, please. Do what I tell you. In the room behind you there *is* a fire escape. Get down it as fast as you can. I just saw a woman come out of that bedroom down the hall. If you hurry you can catch her in the street. Follow her. Find out who she is. Don't lose her. If you do, go back to the Cove and wait to hear from me. Hurry, man; for the love of heaven, *hurry*."

He thrust me into the room he had indicated. The door closed behind me, and I understood that no argument was possible. But the orders he had just given me were so astounding that I felt justified in lingering for just one peep through the keyhole.

I dropped on one knee and placed my eye to the aperture.

Into the room, walking with deliberate tread, came the two men who had been with us on the train.

"You are Leslie Steele?"

"I am," was the calm reply.

"Then I trust you will come with us quietly. Otherwise—"

I dared wait no longer. As noiselessly as possible I opened the window and slipped out on the fire escape. My heart sank at the prospect of descent to the distant street, but I had no choice. I extended a trembling foot and began to climb down the iron ladder.

[CONTINUED IN THE DECEMBER NUMBER]

What About Measles?

[CONTINUED FROM PAGE 33]

catarrahal symptoms. It begins with a spotted look around the lower face and cheeks, which gradually spreads over the chest and entire body. These spots are apt to increase into blotches, and even run together and make big patches, yet the eruption does not have the uniform, even blush of scarlet fever. You are helped in your diagnosis also by the presence of cough and catarrahal symptoms.

Keep the patient warm, but do not overdo it. Dosing with hot teas, keeping the room at high temperature, wrapping in hot blankets, are not only unnecessary but harmful measures.

The degree of eruption has very little to do with the completeness of recovery. Some patients have a very light eruption, but get just as well and enjoy just as much subsequent immunity as do those who are the hue of a boiled lobster from head to foot.

Give a light diet until the fever has passed, and then allow the patient to eat as usual. The use of plenty of milk is always advisable, and the patient may have all the cold water desired, just as it comes from the well.

Wash the eyes with a saturated solution of boracic acid twice daily. It is not necessary to make the room dark, but bright sunlight must not be allowed to glare in the patient's eyes. No reading, writing, or sewing is allowed while any eye symptoms linger.

The most dreaded complication is pneumonia. Measles without complications very rarely results fatally, but measles with pneumonia very often does. Never try to treat a case showing symptoms of pneumonia. Send for a doctor immediately. The patient's temperature should drop after the rash is well out, which takes from two to four days. If it does not, there is some complication that requires special attention.

Just here is where so many calamitous mistakes occur. After the rash and allied indications have shown the case to be unmistakably measles, the caretaker too often relaxes attention before the fact has become plain that no complication is becoming seated, and while the patient's system is at a distinct disadvantage. Then is the critical time to watch for any heightening of temperature, and by means of abundant fresh air and sunlight in his room—screened from the bed if necessary—well-adapted nourishment, and by cultivating in him a cheerful attitude of mind, the tide of disease can be frequently turned before there is opportunity for dangerous after-developments from which many a person must needlessly go handicapped through his remaining days.

The second time of danger in measles is when the patient is allowed up, especially if in the winter season. Better keep the patient in bed too long than allow him up too soon. Be very careful that he is not exposed to other contagious diseases, as his weakened state makes him very susceptible. Guard especially against whooping cough, and protect your patient from severe weather for at least a month after recovery.

IF YOU don't think there is any good coming out of this war, read "For Your Boys—and Mine" next month. It will make you laugh, it will make you cry, and it will open your eyes to something you may not have seen before.

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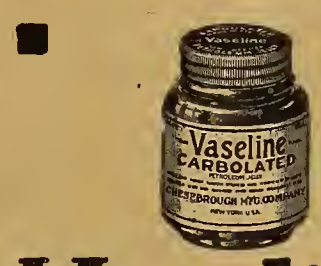

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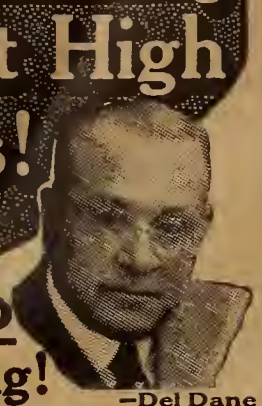

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The Army—a School for Specialists

[CONTINUED FROM PAGE 5]

bad. Conant, manufacturing a specialized article, has no basis of comparison outside his shop to know whether his men are particularly good workmen or not; he can compare them only with one another. By that comparison he considers Gregg and Mowry both to be skilled men and of about the same order of intelligence and ability. They have both been working for him about a year; and the above, taken with the record of their steadiness at work as recorded on the time clock, just about completes his knowledge of these two men.

Now, however, they have been drafted; they have passed the physical examination, waived exemption, and are in the army. Their new employer is going to find out several things about them—and *find out*, not suppose or guess. The Government interviews these new men through the personnel officer, who has before him, for each man examined, a card officially known as the qualification record, but by the men called affectionately, or otherwise, "the bean card"—as recording what's in one's head.

These cards contain a list of the more ordinary occupations in which the personnel division has found that about 90 per cent of all drafted men classify. There is also a supplemental list of less usual trades and professions. The personnel officer marks the cards to indicate occupations in which the recruit has some knowledge and ability and those in which he is skilled. He also puts down the number of years of experience in the indicated occupation.

Gregg and Mowry both registered as machinists. Mowry added that he had worked as an instrument repairer for a few months, and Gregg said that he had some knowledge of chemistry, but no actual experience.

So far, the facts filed on the cards were taken from the statements of the two men themselves; but now the personnel officer had a space to fill in with notes of their standing in intelligence and skill in special trade tests. Both men, if asked, would have admitted intelligence and claimed high skill. Their previous employer would have attested that both were intelligent and skillful, and about equally so. But the army has a few simple tests of its own for determining intelligence and skill, both relative and absolute.

Can't Publish Precise Text

Obviously, I cannot here publish the precise test being given at the camps. The one in the box on page 5, however, is based upon the principles of one section of the government test.

Here is one paragraph of another section of an intelligence test to try out somewhat more complicated mental processes.

The following reasons have been given why New York has become a larger city than Boston. As quickly as you can, place a cross like this + before each reason that you think a good one:

1. New York is on an island.
2. More foreigners live in New York than in Boston.
3. New York is on a large river coming from a rich agricultural region.
4. Mr. Rockefeller has a fine home in New York.
5. New York has more churches than Boston.
6. New York has better communication with the States lying to the west.
7. New York has elevated railroads.
8. New York is in the midst of a rich fruit and agricultural district.
9. New York is nine or ten years older than Boston.
10. New York has a Republican governor.

By other variations of such simple methods, which psychologists have shown competent to separate the more able from the less, the army in a few minutes does what Conant, the employer, failed to do in as many months: it puts Harry Gregg, machinist, in quite a superior intelligence rank to George Mowry, machinist.

The question whether they were in the apprentice, journeyman, or expert class was also to be determined. Gregg and Mowry supposed they were both expert; Conant supposed so. The personnel division, quite familiar with the lack of standards in private plants, "trade-tested" both men. In addition to the intelligence test, it gave the men a series of carefully graded questions bearing upon their trade, selected in such a way that a novice would be unable to answer any of the questions, an apprentice a few only, a journeyman most of the questions, and an expert all of them. Then each man underwent a performance test.

These tests, taken together, showed the personnel officer within an hour what Conant failed to observe in a year. Gregg, a far more intelligent man than Mowry, ranked at his trade as a poor journeyman; Mowry showed the makings of a real expert. Working for Conant, Mowry really had been "soldiering" on his job—to use the old phrase,—since it was enough for him merely to keep pace with Gregg, who was no natural machinist. Therefore the personnel officer, having a request for highly skilled machinists, recommended Mowry to one of the government courses of intensive training in a technical school to make him what he ought to be—a really expert machinist.

Then the personnel officer turned back to Gregg's problem—a more intelligent man, but a poorer workman. Why? Because he did not try? Because his real fitness was elsewhere? The personnel officer observed that Gregg mentioned chemistry as an occupation in which he "had some knowledge and ability." Further interview drew out the fact that Gregg had been studying chemistry evenings, and was much interested in it. The interviewer found that Gregg had a good foundation knowledge of chemistry.

Send the Men to School

There is a great demand for chemists in the army, both behind the lines and with the troops. The personnel officer recommended Gregg for special, intensive training in chemistry to fit him for his duty in war, and also for his career after the war.

Such experiences are by no means exceptional. Anyone living near any of the important technical schools or colleges knows that already the army is sending men by the thousands for advanced technical training.

But it is perfectly plain that the work of making the American Army great and efficient as a fighting force is more and more synonymous every day with the training of Americans of all trades and professions to higher and higher skill and proficiency. Instead of moulding all men to a pattern—and a poor pattern for work in the "piping" times of peace to follow this war—the army actually promises to turn back to industry more skilled men than it took.

For the Government, facing the tremendous technical problems of the creation, support, and supply of a modern army, will not be satisfied with low or even with average technical performance: it demands and sets itself to procure the highest possible. The American Army, grasping the principle of personnel work with which the foremost American business houses have been only experimenting, has in a year boldly developed and successfully extended that work, beyond all records of peace-time progress. Similarly, the army is raising and establishing technical standards throughout all trades and professions that it employs.

Until March 21, 1918, we had no general standard of definition or requirement for the hundreds of trades and occupations at which Americans worked. A man said he was or had been working as an assembler or as a beltman or as a map maker or as a rigger; and each of those terms meant one thing or another, according to what city or part of the country a man came from, or according to what shop he came from, or even according to what part of what shop.

The definitions and requirements for many trades varied, often, with the ideas of different foremen in the same shop. There was no established standard for the nation. Now, the army had to stop that, for it found that when Pershing got to France and began founding the tremendous trade and technical establishment required to keep a modern army in the field his cablegrams constantly became more and more technical. He practically never cabled for more "men"; rather, he cabled for so many more crane operators, compressor enginemen, buckers-up, pattern makers, welders, and so on.

Obviously, it was absolutely essential for Pershing to know, when he cabled for such men, exactly what he was going to get; and, as there was not in existence any adequate set of standards, the War Department compiled and issued, on March 21st of this year, the "Trade Specifications and Occupational Index of Professions and Trades in the Army," defining and distinguishing between the qualifications required for 565 trades and occupations employed by the army. Before each set of required qualifications stands a code word, and now when General Pershing cables one of those code words he knows that he will be sent a man possessing the qualifications set down and able to perform the duties described. This is a tremendous step forward, not only for the army, but for American industry, which, for the first time, has its "dictionary" to correct and standardize the language in which it speaks.

You will say, perhaps, that all this work is very well for the man who was skilled in a trade or profession that the army found useful; but how about the other man?

The soldier who is not assigned to develop his peace-time proficiency in the army still is carried upon the government rolls for what he was and is. His qualification record never ceases to bear proof of his civilian training and skill; it never considers him solely as a soldier. The attitude of the personnel officer, from first to last, is an endeavor to seek out and develop each man's specialized tastes or abilities, and to make each man think of himself as developing, or as capable of developing, along his particular line.

The soldier is more of a soldier, rather than less, because latently he is always a specialist at the thing he is best fitted to do. He never knows, and the Government never knows, when an emergency will call for just the qualities written upon his card.

Mr. M. V. Bingham, of the Committee on Classification of Personnel, illustrates thus:

"The colonel commanding a regiment of engineers in one of the Southern encampments came to the division personnel officer for help in finding a man for the most responsible position an enlisted man can fill—that of regimental sergeant major. The colonel was looking for a man of commanding presence and force of character, sufficiently mature, with military experience. He wanted someone with clerical experience, preferably as an accountant, and also with engineering training.

"The personnel officer thought that was a pretty large order, but after studying his qualification record cards he picked out three possibilities. The one who was finally selected met in full the colonel's varied specifications. As a boy this man had enlisted in the navy and risen to the rank of machinist's mate. He had then left the navy and worked as a stenographer and bookkeeper. He is now twenty-six years old, and at the time of his enlistment he was senior in the Engineering School of Tulane University. Moreover, he was a private in that colonel's own regiment."

Use the Cards After the War

The qualification cards for every man go with the unit to which he is attached, and their use will by no means end with the war. The Secretary of War, recognizing their invaluable service when the time for mustering out arrives, already has instructed that they be preserved for peace use. The Assistant Secretary of Labor independently made the same request, as also did the president of the United States Chamber of Commerce. The surgeon general's division in charge of rehabilitation of men injured in the war already is using the results of the personnel officers in the training and placing of the soldiers already returning.

Do not worry about the mustering out of our millions when peace comes; do not fear for the men who are to come back to their peace-time tasks, or for the industries in which they again will claim place. For the tremendous task of rebuilding and recreating the sinews of society destroyed by war, the army will return American manhood better trained, better disciplined, better directed, than it was a year ago to perform the tasks of peace.

HOW President Wilson treats his friend Colonel House when he comes to Washington for a visit is one of many interesting personal incidents about the nation's chief executive in "Woodrow Wilson: Human Being," in next month's Farm and Fireside.

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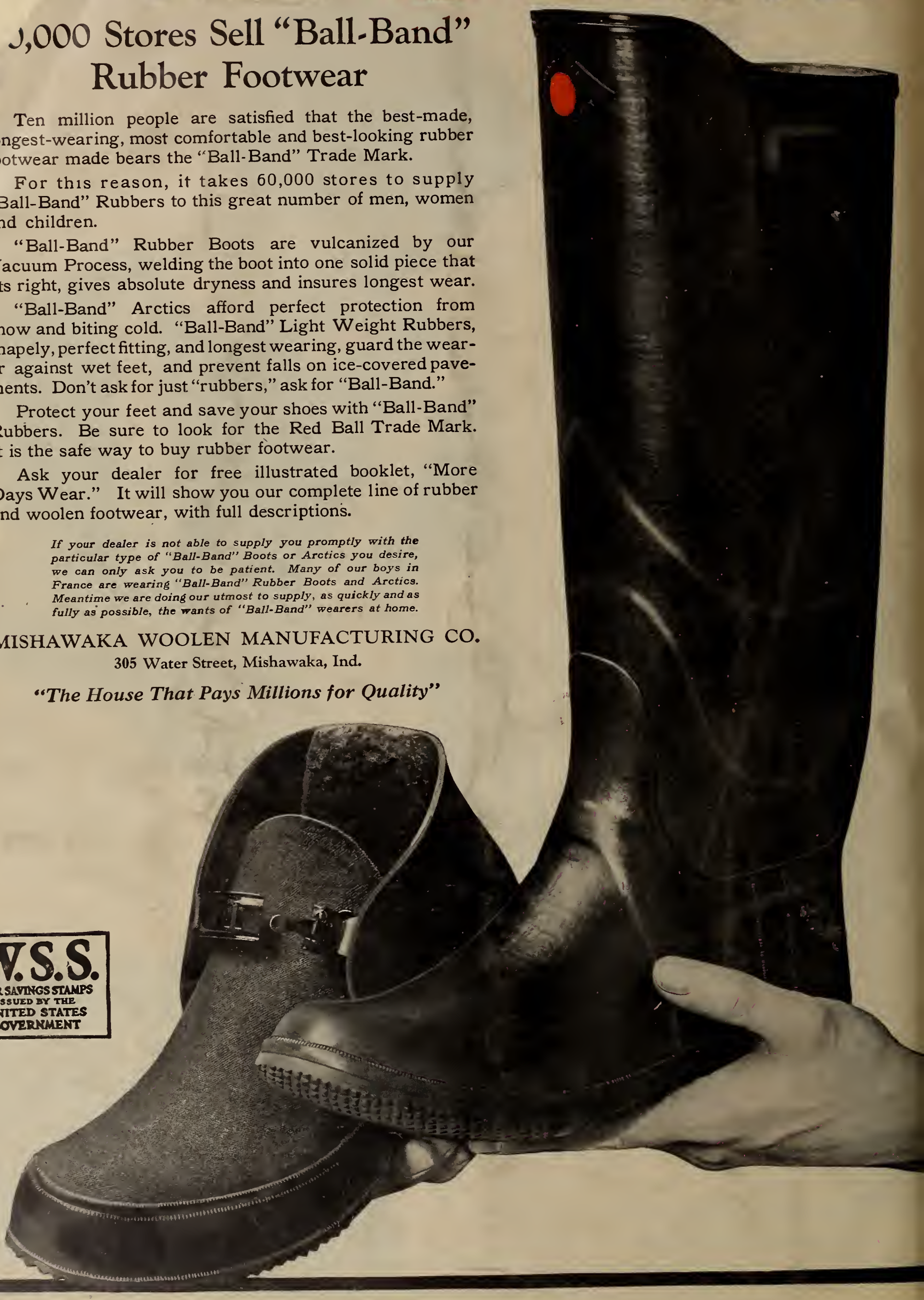

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The National Farm Magazine

DECEMBER 1918

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Twelve Years a Failure; Twenty a Success—By W. P. Rogers

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1919

Wear Your Button

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The World is Owned by Men Who Cross Bridges Before They Come to Them

By Bruce Barton

A YOUNG man came one day to Lorin F. Deland, that wise adviser to business men, and said this: "I have been three years in the same job, and I feel that I am entirely lost sight of by my employers. There is no future ahead of me; I am discouraged and hopeless. What shall I do?"

Mr. Deland answered: "I will undertake to help you, but you must promise to do exactly as I say." The young man promised hopefully.

"For thirty days," said Mr. Deland, "I want you to concentrate every working minute on the following problem: 'What suggestion can I make to my employer by which he can in the next calendar year increase his sales $50,000, or $5,000, or $500, or $100?'"

At the end of thirty days the young man returned crestfallen to report that he had not been able to think of one single suggestion.

Mr. Deland then gave him his problem for the second month:

"Devote every energy to discovering some way by which your employer can in the next year save $5,000, or $500, or $50 in the cost of conducting his affairs."

At the end of the second month the young man was back again with a second confession of failure. He said also that he had decided not to ask for any further help.

Then Mr. Deland spoke his mind:

> So, Mills, you don't care for any more of my advice [he said]. Well, this time I am going to give it to you without your wanting it. My boy, just realize a moment where you stand. With the enormous amount of clothing business that is being done, you are not able, though you have been three years in this house, to increase the volume of business $100 a year; with the elaborate and necessarily wasteful methods in which that great business is transacted, you are not near enough to it to point out a better system in any department whereby the small sum of $50 a year may be saved.
>
> My boy, lie low! Attract just as little attention to yourself as you can. Don't let the manager remember that you have been three years in his employ if you can help it. If he knew how incapable you are of development or progress he would charge you off for some young man of greater promise. Lie low, my boy, lie low.

That young man was typical of thousands—the great unimaginative horde who have never in the slightest degree developed their imaginations.

I do not like the phrase "never cross a bridge until you come to it;" it is used by too many men as a cloak for mental laziness.

The world is owned by men who cross bridges on their imaginations miles and miles in advance of the procession.

Some men are born with more of imagination than others; but it can, by hard work, be cultivated.

Not by mere day-dreaming, not by lazy wondering, but by hard study and earnest thought.

You and I say to ourselves idly: "I wonder what is going to happen when the war is over."

But the other day I had luncheon with a group of men who said: "At least a thousand different developments are coming at the close of the war, each one of which will make men rich. *Beginning to-day we start to study.*"

I met another man who has recently been added to the staff of a great concern engaged in exporting goods to South America.

That man has never seen South America; but on the day war was declared in Europe he said to himself: "Europe's trade with South America is coming to us. I am going to learn everything there is to know about that continent."

He crossed his bridge four years in advance.

Looking into the future, what bridges do *you* see?

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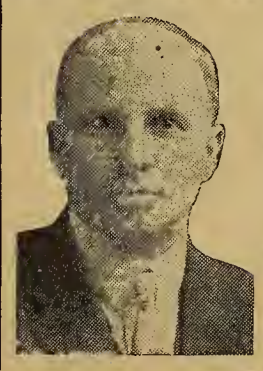

Only a short time ago this young man, Walter Kaley of Pennsylvania, was working in a machine shop.

He was looking for bigger opportunities—for work with prospects for the future. He learned of the proposition which FARM AND FIRESIDE offered to its representatives.

He undertook the work—not without some uncertainties at first. He was soon so successful that he induced four of his brothers to join him. Since then several other young men came with him, forming a crew. None had any special training for the work—one was working in a sand quarry, another was driving a tea wagon, etc.

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Published Monthly by
The Crowell Publishing Company
George D. Buckley, *President*
Lee W. Maxwell, *First Vice President*
Thomas H. Beck, *Second Vice President*
Albert E. Winger, *Treasurer*
L. V. Rodda, *Circulation Manager*
Springfield, Ohio

FARM AND FIRESIDE

The National Farm Magazine

Harry M. Ziegler, *Managing Editor*
George Martin, H. H. Haynes, Helen L. Crawford, *Associate Editors*
Alden Peirson, *Art Editor*

Editorial and Executive Offices, 381 Fourth Avenue, New York. Branch Office, 1316 Tribune Building, Chicago, Illinois.

Entered at Post Office at Springfield, Ohio, as second-class matter, under Act of March 3, 1879.

By subscription, 25 cents a year; three years, 60 cents; or five years, $1.00. Single copies, 5 cents.

Volume 42 DECEMBER, 1918 Number 12

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Woodrow Wilson—Human Being

The man in the White House works long hours at a hard job and prefers to be looked upon by his fellow men as just a plain everyday citizen

By George Martin

A VERY small boy with a very large bundle of newspapers rushed excitedly around the corner of Thirteenth Street into Pennsylvania Avenue in Washington the other day to see what the crowd was gathering for.

He saw a tall, quietly attired man lift his gray crush hat to the throng as he alighted from an automobile and strode across the walk into the Munsey Building. The boy turned away in disgust:

"Aw, gee!" he informed himself, "it's only th' President!"

There was no disrespect in the remark. But it revealed a state of mind which pervades the whole of Washington. Woodrow Wilson, President of the United States, is just a citizen one is likely to meet on the street any time. The attitude is very much as your attitude toward the president of your home-town bank, or some other leading citizen you frequently meet at the post-office or courthouse square. Of course it never occured to the newsboy that newsboys elsewhere would nearly break their own and other people's necks just to catch a glimpse of the man he had characterized as "only th' President." Practically every person in the crowd that day was from out of town. The President's appearance in public unescorted no longer excites pause or comment among Washingtonians. And that is unusual, for most of our Presidents prefer to appear as personages on every occasion, even if it be only a trip to the bank or some government department.

The newsboy's attitude—which also is all Washington's attitude—is as Woodrow Wilson would have it. He hates restraint, and ceremony, and pomp. He cannot see why he should be treated any differently than any other person who lives in Washington. And he does his best to see that he is not treated any differently, either.

The White House, thanks to the anxiety of his official family for the President's welfare, is more or less of an armed camp. Day and night, sentries with fixed bayonets pace the public streets that form the outer boundaries of the grounds. They are stationed less than twenty feet apart. Within the White House itself there is a heavily manned police station. Uniformed guards stand at every entrance to the grounds and the mansion. Secret service men are on duty near the President all the time. When he goes for a drive, motorcycle officers and a secret-service car chug along in his wake.

These things irk the President. He doesn't think they are necessary, and he takes no pains to conceal that he doesn't like them. In the early days of his first term he tried to have them removed. He succeeded only in having them made less intrusive. The secret-service car, for instance, was not dispensed with, but the distance between it and the President's car was materially increased. And the secret-service men themselves have gotten to blending themselves into the normal scenery about them as much as possible.

But the President's resentment persists. He evidences it occasionally by deliberately scheming to evade his pursuers.

As an instance of this, the writer happened to be sitting in the reception-room of the north wing of the White House one afternoon not long ago, waiting for Secretary Tumulty, when he heard a quick, alert step coming down the shadowy corridor leading to that wing from the President's quarters. In a moment the owner of the step appeared from the gloom of the hall. It was the President himself, unescorted. He walked quickly across the room, through the door and across the yard to the north gate, then down the steps and across the street to the State, War, and Navy Building. He had trotted up the long steps and disappeared in that building several minutes before a distracted secret-service man came tearing down the corridor after him, glanced at the gate policeman's pointing finger and hurried on, greatly worried.

Of course, it was all the President's fault. The accepted thing would have been for him to have informed the proper official that he wanted to visit the State, War, and Navy Building. The official would have asked who he wanted to see there, and these persons would have been duly informed by phone to expect a call from the Chief Executive. Then a secret-service man would have been summoned, the reception hall would have been cleared, all the guards would have been notified in the State, War, and Navy Building and a clear path made for the President from the door of his study to the inner office of Secretary Lansing, or Baker, or whoever he wanted to see. Then the procession would have formally started, concluding with a triumphal entry at the Secretary's offices.

No one must worry him with business when he invites them to golf. If they do, he doesn't invite them any more

There is probably less of the President and more of the human being about Woodrow Wilson than there has been about any occupant of the White House since Lincoln. He does nothing for effect.

Shortly after he arrived in Washington Mr. Wilson was tendered an honary membership in the very exclusive Chevy Chase Country Club. This club prided itself on the fact that more than one President had golfed on its carefully groomed course. As a club, it was inclined to be a little "uppety" on this account.

But it is of record that when the President got ready to golf he quietly bought and paid for a membership in the modest and unassuming Washington Country Club, situated amid the rolling farm lands of Virginia, just across the line from the District of Columbia. This club's members are good, substantial men of democratic manners and no social aspirations. They include army and navy officers of high and medium rank, government clerks, departmental employees, Virginia planters, and some newspapermen.

It is to this quiet club that the President goes almost every morning for his round of golf. He likes to play alone, but occasionally Dr. Carey T. Grayson, his personal physician, goes around with him, and once in a while Mrs. Wilson herself. The President is up punctually at seven o'clock every morning, winter and summer. He eats breakfast in his room, sometimes with Mrs. Wilson, sometimes alone, because it takes less time and trouble than waiting to breakfast with the entire household. He shaves himself with an old-fashioned razor, which he strops himself on a well-blackened leather which he has been working into condition for many years. It is well known around the White House that his razor strop and his ancient typewriter are two of President Wilson's most prized possessions, which no one ever operates but himself.

It is notable that the deeper you go into the details of this man's everyday life, the more you are impressed with his utter simplicity. Breakfast over, he starts immediately with the business of the day. Coming down-stairs to his study, he runs quickly through the mail which has been opened and placed on his desk. If there is anything that needs immediate attention he personally dictates an answer. By 8:15 he is ready to leave the house, and off he goes in his car, sometimes in golfing costume and sometimes not.

You would naturally suppose that the members of the club, knowing that the President golfs for an hour every day, beginning at nine o'clock in the morning, would overrun the links at that time, and fill the place with out-of-town friends who want to get a close-up of the Executive. But President Wilson knew what he was doing when he joined that club. He made no rules and stipulated no conditions when he joined, but it is a fact that the first morning he drove out the links was strangely deserted. It has come to be the unwritten law of the club that the course shall be left to the President between nine and eleven o'clock every morning.

Mr. Wilson didn't ask this, and I am not sure that he wouldn't like to have a few others going around the course with him, but the club just decided to do things that way, [CONTINUED ON PAGE 14]

Private and Confidential—from the President to *You*

PRESIDENT WILSON went to a Gridiron Club dinner in Washington one night, leaving his official dignity at home, and told the assembled newspapermen how lonesome he sometimes gets and how he would like to go out in the streets and mingle with the crowd and be just a quiet unknown again.

"I would like," said he, "to put on an old suit of clothes and go fishing with the boys. I would like to stop and talk things over with the policeman on the corner. I would like to sit on a fence and chat with a farmer I happened to meet while driving a horse and buggy through the country. I would like to feel free to go and come as I please, to do what I please and to say what I please. But, of course, that can't be done."

The quotation is not precise, but his words were to that effect. They prove him the warm-hearted human being that his job at the White House has sometimes made him appear not to be. The truth is that Mr. Wilson has been so busy being President that he hasn't had much time or opportunity to get acquainted man to man with his fellow countrymen. But he wants to. And you ought to know him personally. We therefore present to you this month: "Woodrow Wilson—Human Being." We know you'll like him. THE EDITOR.

What I Saw in a Paris Air Raid

Which explains how the boche's air raids failed to prove that the French and English are as easily terrified as he is

By William Harper Dean

THE Germans couldn't understand why France and England didn't fall on their knees and cry for peace and mercy when boche planes bombed Paris and London. That's what the Germans did when their towns were bombed by the Allies, and they think other folks must be streaked with yellow just because they are.

In "What I Saw in a Paris Air Raid," William Harper Dean tells of his experiences in midnight air raids in both Paris and London. In Paris, the morning after that raid, people went about their affairs and ignored the wreckage, and Dean's host scolded him for even suggesting that there had been a raid. In London he found the effect of a night raid confined to curiosity on the part of guests in his hotel, and rage on the part of the bellboys because they would have to shine all the shoes over again after the guests came back from their sightseeing.

The article is worth reading for many things, but mostly for the slant it gives you on two indomitable, unbeatable peoples—the French and the British. THE EDITOR.

BISMARCK'S theory was that to bring war to an end one must take it to the very firesides of the people whose armies oppose compromise, must make war so horrible for the people at home that they will demand an unconditional surrender.

For four years the German took his midnight "terror" to the very cradles in French and British homes, and never were these people stronger.

Before I went to France I used to wonder what were the sensations of a night raid, wonder what the mothers of France and Britain went through those nights when the Hun would break through the defenses and drop death into the heart of the congested districts. For, be it known, he takes the premise that bombs dropped into the poorer quarters are certain to find choice targets among the children. The second premise is that a terrified, war-weary mother is the best possible material for the kindling of the fires of revolution.

Midnight was the hour which the brain of the assassin of peace set for his work. You got the warning, such a warning as even the Hun might have planned, one which in the first weak moment of struggle back to consciousness chills to the very marrow and raises goose flesh down the spine. It's the siren!

Sk-ree-ee-um-m!

I struggled up in pitch blackness from a dream about things five thousand miles away, found my light button and snapped it on.

Sk-ree-ee-um-m! Sk-ree-ee-um-m!

"Never leave the house: always go to the cellar!"

The Paris Military commands this; the gendarmes will enforce the decree. And old madame who presides over the war-time destinies of the little hotel insists that it is suicidal to go outdoors. She has seen four years of this thing.

Madame may be right, I reasoned as I jumped into my clothes, so may be the Paris Military, as well as those short-caped gendarmes, but I couldn't stomach the thought of a cellar with the bursting walls and the flying stones. I wanted the open—to see it and breathe it.

SK-REE-EE-UM-M!

The siren tore past under my window. The next moment I was dressed and out in the black hallway, making for the street five flights below.

On the stairs I crashed into Preston, an ambulance driver from Verdun. He was on his way up to get me. We made the street with its lamps all blue-shrouded. Down Mont-Thabor we ran to the Rue Castiglione, then into Rue de Rivoli, straight along the ancient high-walled Tuileries to open Place de la Concorde.

The thunder increased in violence.

"The barrage is up!" yelled Preston; "the boche is here!"

We stood with our backs against the monument of Alsace, rising like an unshaken pledge in the very center of the storm, still draped with the tricolor of France.

Away in the distance I could hear the shrieking of the sirens as though the cataclysmic din were not warning enough of the assassin's presence. Overhead droned and whined the planes of the Paris Air Patrol, like the motif of some wild symphony, while the planes darted among the stars like enraged fireflies, spitting red streaks from their machine guns, and maneuvering to drive the Huns into the barrage.

The din swelled—not a barrage concentrated in any one arc of the city's circumference, but a barrage playing in the north, east, south, and west.

"Lord," muttered Preston, "he's here with bells tonight! Usually he breaks through from the northeast."

Suddenly tnere came from above a loud, musical hum, like the sound of a giant top spinning furiously on a sounding board. With tail-light aglow, a plane hurtled beneath the stars, turned, swept away with incredible speed, like a cast-off fragment of a meteor.

What *was* the matter with that plane?

Down it dived, turned, and, working still lower, drove straight for Preston and myself hugging the base of the pedestal. It was so low that we could see the pilot as he tore across the path of the moon.

"A winged Hun as sure as ——!" gasped Preston. "Look out—duck!"

The searchlight of that plane was full in our eyes; the plane itself came tearing at us not more than fifty feet from the ground. The propeller was moaning deep.

It swung to the left, barely grazed the Egyptian obelisk, and then—

Once I was on a train going a clean fifty miles an hour when it struck a broken rail and turned over in a cut. The crash of it rang in my memory for years.

But the crash of that huge battle plane as it wheeled and drove head on against a massive column of steel and stone just a biscuit's toss from where we stood—it was epochal. It shook my every sense.

We must have stood immovable for a full half-minute. Then we started pell-mell for the mass of wreckage. We found it reeking with the fumes of *essence* which ran in streams over the uprooted concrete, over our shoes and into the gutter.

And while we stood there and stared, a broken, twisted thing in lacerated leather, with helmet driven down over its eyes, while blood leaked from under the rim, lurched crazily out of that wreckage, pawing the air and muttering.

Preston leaped forward, caught the reeling form and tore off the helmet. I took one quick glance at the ghastly face, and then ran to another bit of human wreckage cast twenty feet away. This was the machine gunner, and he lay there very still.

A LITTLE group had gathered, two or three French officers and as many American privates. Where they came from I never learned. But that didn't matter, for the great thought then was that this was a French plane. In a trice the Red Cross man had cornered a wandering taxi and whisked his charges off to a surgeon.

A volley of ear-splitting explosions tore loose at my very elbow. I whirled to see a big French *camion*, which had thundered up unnoticed in that din, working its anti-aircraft gun like mad. The volley finished, it roared away.

Overhead a terrific burst of shrapnel shells shook the air, and as I watched it a Hun bombing plane, its signal light snapping furiously, drove through that hurricane of steel and climbed back to safety like a luminous bullet.

Swish, swish, thuck! Shell splinters came whipping past, burying themselves in the concrete. Across the Place a gun tore loose from a roof—everywhere they were barking like hidden watchdogs.

Suddenly silence—a silence which hurt the eardrums. Even the shrieking siren was still. A few stars were shooting through space, and so proving themselves to be battle planes. The red glow still stained the heavens. The barking of a dog somewhere sounded very loud. Unnoticed, a phantom mist had gathered and was hanging low, the dim lights of a taxicab boring through it like a pair of yellow coals.

Something was hurting my teeth. I felt and took out my stone-cold pipe.

"Let's go!" said someone.

And before I reached the little hotel the black canyons of Rue de Rivoli were ringing with a bugle sounding the "All clear." There had been three hours of it.

NEXT morning I threw open the windows to the balconies overlooking the street and let a flood of golden sunlight into the room. Across the way other windows were up and women shook out rugs. On another sill somebody had put out a caged bird and the little fellow was fairly bursting his throat with song. Up from the street came the song of a peddler. Then the horn of the mender of broken chairs, and somewhere the clear laughter of a child.

Had it really happened? No, one can't dream these things. Besides, there on the table lay a section of the broken propeller of that wrecked French plane.

Now, then, I thought, how much fear has the Hun put into the hearts of these people? How have they taken it? I put on my cap and went out to learn.

In the hall I met the floor valet, a discharged soldier from the Marne. He began to laugh as he told me how last night he had started to open the window in his room when a bomb had landed in the court and blown the glass in his face.

"Was your wife frightened?" I asked him.

"No, no, no!" he shouted, waving his hands. "But she could kill the German emperor for the two francs it will cost to replace that glass."

Down in the streets taxicabs were honking their noisy way through the traffic. The sidewalks swarmed with the kaleidoscopic colors of uniforms of French, British, Americans, Australians, New Zealanders, Senegalese, Chasseurs, Serbians, Belgians, Turcos—laughing, jostling on their holiday from the front. I began to look for the terror-stricken.

Not far from where Preston and I stood in Concorde last night, three of the Hun's bombs had hit close together in the narrow street. Everything in the radius of their destructive power had been killed or wounded.

There were whole blocks of buildings shattered of every pane of their glass from concussions alone—glass a quarter of an inch thick. In the streets glass lay ankle deep, and scavengers were shoveling it up into their tremendous two-wheeled wagons; whole buildings gutted as the air tore out of them to fill the vacuums made by bombs exploding half a block away; a mangled dog hanging on a balcony rail where it had been blown from the street; rescue workers digging in cellars, with the dead packed under the wreckage.

That night, as during every air raid on the city, the American Red Cross rescue crews were at their posts, waiting in steel helmets and gas masks for the calls from their representatives in the offices of the Commissaires de Police, where instant reports of bomb explosions were reported by telephone. From ten to fifteen Red Cross ambulances stood ready for instant summons.

One ambulance party received a hurry call to a building which had been struck by a bomb, and all the floors of which, save the first above the street, had been blown out. One slender iron pillar supported the tottering wreckage.

There was every reason to believe that several persons were buried beneath the mass, some of them, perhaps, alive. In the crowd which had collected at this point were a number of Australian soldiers, who mounted the sloping mass of wreckage and were digging madly at it. They could hear a voice calling for help.

The good intentions of these sturdy men from overseas and their [CONTINUED ON PAGE 23

Dozens of these signals were used to spread the alarm

Twelve Years a Failure; Twenty a Success

By Willis P. Rogers

"Mrs. Rogers has two hobbies—her house and her flowers. Not that she forgets me—looking after me is her regular business. The other things are her pastimes"

I HAVE been a fruit and truck farmer for thirty-two years. The first twelve years I was a complete failure. The rest of the time I have had more or less success. Naturally, in that time I have learned some pretty rigorous lessons; and I think that what I have learned is important. Perhaps not. But I have learned one thing which I know is important to everyone who hopes to get along in the world. It is this: No man ever "happened" to be a success. Success has got to be built, just like a house, or a piano, or an engine. You've got to have the right foundation for it, and you've got to put the proper materials on that foundation in the right way, just as you do with a house, or you will fail.

Every year for twelve years I went at fruit and truck farming on the wrong basis, and every year my bad foundation crumbled under me and my crops collapsed, leaving me a little deeper in the financial hole with each successive crash.

I failed because I had the idea that to be successful all you had to do was to plant your seed and sit on the fence and watch it grow—about as sensible as dumping a car of stone in a hole and waiting for it to form itself into a foundation. I later succeeded because I got over that idea, made a careful study of the kind of materials I had to work with—type of soil, possible crops and possible markets—and began to build with them toward success.

For twelve years I had been farming about as logically as a man who would start out to manufacture cloaks and suits without knowing anything about sewing and cutting machinery—I knew nothing about my growing machinery, the soil; and who selected his fabrics blindfolded—I selected my crops blindfolded; and who made them up in bad styles—I grew my crops in bad style; and who sent his sealskin coats to Florida in July and his silk sweaters to Alaska in January—I once grew 20 acres of willows for furniture, and tried to sell them to a market which had long since turned to wicker products.

First He Tried Raspberries

THIS blundering on my part serves one good purpose: it brands me as an average man, proves that my later success was not miraculous, and that what I did any man can do if he will study his problems and build his success.

In my years of failure I could not understand why it was impossible for me to make a success with the same land and the same crops with which my father and grandfather had succeeded. I know now, of course, that it was because the farm had changed—(the soil was tired of growing the things they had grown)—and markets had changed. There was no longer a profit in some of the things they grew.

If I had just stopped and thought over what my father did with the farm his father left him, I might have saved myself years of failure. But I didn't. That is one great trouble with most of us: we plunge ahead and do not stop to think.

My grandfather bought and cleared the 100-acre home place in 1835 and 1836. He set out a few fruit trees, but did mostly hay, grain, and general farming. He made a very fair success. My father took the farm after his death and gradually worked away from general farming. He knew the country was developing, and that it was up to him to specialize his crops. Along in 1875 he set out about 75 acres of apples, and later built a fruit-drying plant. It never occurred to me that he might have had a very good reason for setting out those apples and building that plant. If I thought about it at all I thought he just "happened" to do it. I know now that he foresaw rail and water transportation facilities developing, and realized that there would be a good market for dried fruit.

Father also grew raspberries, peppermint, and willow for furniture. He made good money out of all of them. From 1880 until 1886 my brother took the farm. He wanted to grow raspberries, so he forgot everything else on the farm and concentrated on them. Concentration is a fine thing, except when it's misapplied. My brother concentrated on raspberries for six years, but he couldn't grow them. He didn't have the right foundation. The soil which had been growing money-making crops of them for Father was tired of growing them. Instead of trying to figure it out, my brother devoted his time to wondering why he couldn't do it. Finally he got disgusted, and said: "Well, if I can't grow raspberries on this farm, I'll get a farm where I can grow them." And he did.

But I think he was wrong. I don't believe in giving up and going to another place. You are too apt to get the habit of moving around. You know how sheep will see nothing but the sparse grass land under their feet, compare it with the land over on the next rise where the angle of looking at it makes the scattered grass appear as a green carpet, and go tearing off after it. Of course they run themselves nearly to death, and the green grass is always just over the next hill. Men get that way. They always see something promising just over the next hill. I don't mean that this always happens, but very often it does.

The mistake my brother made, and that I made for several years after him, was in being bull-headed with the land. We tried to grow what *we* wanted to grow, never giving a thought to what the land wanted to grow.

So in 1886 I took the farm, confident as only a young fellow can be that others might fail, but I could make it go. But, sad to relate, I too tried to follow the old order blindly. I tried raspberries, and failed; apple drying, and failed; willow growing, and failed; and this and that and the other thing, and failed.

Then I began to wake up. I pulled out the willows, which had grown wild on the muck land ever since my sad experience with them, and decided to grow onions. I knew that I ought to go at the proposition sensibly, and I had spent a good deal of time figuring out the value of growing onions. I knew there was a market for them, and I knew they could be grown in my part of the country, because other men were doing it and making money.

So in went two acres of onions. But they didn't grow. The first year's crop caused me a loss of $150. The next year I tried again, with the same result; and the year after that, and still I lost money. But I was determined to grow onions. I knew the soil wasn't tired of them. I knew I could sell them if I could grow them, and I knew they could be grown, because others were growing them. I concluded that I must have gone it blind somewhere along the line in spite of my figuring, and I determined to find out where the stones were missing in my onion foundation.

About that time I heard of a certain "highfaluting" professor by the name of Roberts, who traveled around giving demonstrations and lectures on cultivation. When he came to Williamson I went up there and listened to what he had to say. That was in the days before college farmers were thought much of, and not a great many folks paid much attention to what they said and did. But I decided that Professor Roberts couldn't lose me anything, even if he didn't have anything for me; so I followed him up for a while.

Who Rogers Is

WILLIS P. ROGERS, who writes this remarkable story of his successful career, is a truck and fruit farmer of Williamson, New York. In addition to being a successful farmer in his own right, he is president of the New York State Fruit Growers' Association, president of the Wayne County Farm Bureau, vice president and director of the Williamson Cold Storage Company, vice president and director of the State Bank of Williamson, which he organized, and a director and stockholder in the Wayne-Monroe Telephone Company.

Mr. Rogers has bought, developed, and sold many hundreds of acres of Wayne County farm land, and still actively manages several of the best of them, which he has kept, and which total about 300 acres.

His story should be an inspiration to any man who is still on the uphill road, as most of us are. He certainly has had about as much woe in farming as can readily come to one man, and the splendid manner in which he has fought out his dreary battles is enough to make things look brighter for those who are to-day doing the same thing.

THE EDITOR.

"I don't always feel so serious as I look here. There really is a lot of fun to be got out of life after all the serious propositions have been disposed of"

Then Makes a Go of Onions

HE WAS an enthusiast on cultivation. To prove his theories, he went into the field and demonstrated that if 150 bushels of potatoes could be grown on an acre of land without cultivation except for weeds, 300 bushels could be grown on the same land with cultivation to retain moisture.

That set me thinking about a lot of things. My idea of cultivation always had been that it was just a way to kill weeds. Even to this day men come to my place, see me cultivating crops that have no weeds in them, and ask me what I'm wasting my time doing that for. You may believe me, it is anything but a waste of time.

It occurred to me that maybe Professor Roberts had put his finger on the trouble with my onions. I don't mean just cultivation, but soil conditions in general. I figured it out that he was a successful potato grower because he knew his soil and how to handle it. Perhaps if I went to the men who were growing onions successfully they would tell me about that. And go to them I did.

There is another place where the young fellow is apt to make a mistake: he hesitates to ask for advice, either because he doesn't like to admit that someone else knows more than he does or because he is afraid he will meet a rebuff. Don't he afraid to ask questions. The worst any man can do is to refuse you an answer, and he may give you a lot of valuable information. I have met both kinds, and I will tell you later about my experience with one who wouldn't talk to me.

I found the onion men willing to help me all they could. They pointed out first that I was trying to grow onions on wet muck, a thing I never in the world could do. Secondly, they showed me that I was using the wrong fertilizer and not enough of it.

Home I went and followed their suggestions. I drained the land, then studied fertilizer. I found the kind best suited to my soil, and then did a little figuring on my own account. If 300 to 500 pounds of the right kind of fertilizer would grow 300 to 500 bushels of onions to the acre, why shouldn't 1,200 to 1,500 pounds grow 1,200 to 1,500 bushels? I put in 20 acres of onions and tried it. The result was the biggest crop of the best onions that had ever been grown in that part of the country. I actually got 1,200 bushels to the acre—big, fine onions.

Just as I began to think my foundation was pretty sound and I was on the high road to success, another thing cropped up: the market was low. There I sat with 20 acres of good onions and no way of realizing a profit out of them. Sell them? Yes, I could sell them. But for what? As luck would have it I managed to wiggle out of that situation by storing my crop until along in the winter, when I sold them at a very handsome profit and put myself on the credit [CONTINUED ON PAGE 32]

Does Your Stock Eat Up Your Profit?

By Thomas J. Delohery

I HAVE been pretty closely associated with all kinds of stock feeders for a good many years, and I think I have gotten to know pretty well why some of them succeed and others fail. I have studied both kinds, and tried to dig down to the basic reasons for the results they got, whether good or bad. If the results of this experience can help you readers of FARM AND FIRESIDE to be better stock feeders, or keep you from making the mistakes I have seen so many feeders make, I am glad, and the writing of this article is worth while.

Probably the most fatal mistake of all the mistakes made by feeders is the very common one of letting hogs and cattle eat up the profits while they are being fattened for market. It isn't the price you get, nor the quality of stock you have for the market, which determines how much profit you make. It is the difference between your selling price and the cost of feeding that you must watch like a hawk.

I think this idea was mighty well put by Ben F. Meyers of Dexter, Iowa, a very successful feeder of whom some of you may have heard. I was talking to him at the yards one day about stock-feeding, and we had been discussing different angles of the business, when suddenly, in his clear thinking way, he summed the whole thing up by saying:

"Delohery, there is only one way to make money as a feeder, and that is never to get so much into a steer that you can't get it out."

To my mind there is only one way to avoid this pitfall. That is to decide beforehand what you want to do, then get down to facts and figures and find out if you can do it. You can take a bunch of steers or a herd of hogs, find out what shape they are in and what kind of feed they must have, then dig into your feed market and find the cheapest feeds that combine the fattening ingredients you must have, then get your market charts and find out by studying the ten-year averages what price you are apt to get for that stock at the time it will be ready for market. This is the only sure way to find out beforehand whether you are playing a winning or a losing proposition. If it looks too risky, put it aside and feed the kind of stock and the kinds of feed that *will* make you money.

It has been my experience that more live-stock feeders fail because of improper management than because of improper feeding.

The stock feeder who sits down with paper and pencil and goes closely into the details of what he proposes to do stands a much better chance of making a success than the man who sits in the feed lot day and night worrying about the condition of this steer or that hog.

Successful live-stock production does not consist entirely of throwing the feed into the bunks. It involves a knowledge of markets and marketing, both of feeders and the finished product.

As an example of the value of knowing feeds, the experience of Ross C. Reece of Hardin County, Iowa, who marketed a load of 199-pound hogs, which brought $19.85, the top of the market on that day, is very interesting.

"Corn was worth $2, and tankage $80 or better, a ton," said Mr. Reece, "and the ration was costing me considerable. Besides, my corn was running out, and I didn't want to pay $2 for more, so I called in our county agent and told him my position. I told him what I had been feeding, and he figured a while and found that the ratio of the ration was five parts of protein to one part of carbohydrate equivalent; whereas the hogs at that stage needed a ratio of only seven to one. My hogs had reached their maximum growth, and needed starch for fattening.

"We then figured out a ration of three pounds of corn, three pounds of oats, and one pound of gluten. This feed was much cheaper than corn and tankage, and at the same time gave the desired results, because it contained just enough protein and an abundance of starch—the thing the hogs needed most at the time."

F. F. Latta of Logan, Iowa, one of the big feeders of the State, last summer fed 1,000 hogs. This required lots of $2 corn, but Latta didn't use only what he had to. Instead, he substituted as far as possible with 60-cent oats, oilmeal worth about two cents a pound, and fed tankage on pasture. This was management that resulted in a saving in the feed bill.

A. Wilson of Burnside, Illinois, a former county agent, last summer sold 10 loads of hogs at one time for $18.50, the top of the market for the day.

"I didn't feed these hogs tankage after they had reached their full growth, but I am sorry I didn't," said Mr. Wilson. "I think they would have done better, despite the fact that the gains were a pound a day. Last year I marketed a string of cattle, and at the time I asked hog men about the future of the market. In addition to this information, I studied the future of the trade from every possible angle, getting figures on the past of the market, together with the experiences of veteran shippers; and finally decided that hogs would go to $19 in August. I started feeding the pigs right away, so as to have them ready by that time."

Had he waited a few days more, he would have reached the market when hogs were selling at $19 a hundredweight.

When Wilson took over his farm his help had the habit of throwing corn for the hogs on a patch of muddy ground near the fence. They didn't bother looking for a dry spot—that was too much trouble. Wilson, seeing this, ordered them to find a dry place, or put the corn back in the cribs. He said that throwing the corn in the mud was throwing away money, for some of it was wasted. These little savings count, especially when you get to market with your stock.

Another example of Wilson's plan of management is his refusal to buy a bunch of shoats, because, he said, they had been fed nothing but corn, and while they were fat, yet the corn had stunted their growth, and it would take too much high-priced feed, such as tankage, to get them growing again. If he hadn't studied conditions he wouldn't have known that. But he had. That's why he's successful.

Good management can often make a success of mediocre work with live stock, but a good stockman will usually fail if he is a poor manager. As the costs of feeds increase and market conditions fluctuate, management becomes a vital part of the feeding and producing business. With the details of the business at his finger tips, the live-stock producer, if he be a good manager, can meet almost any emergency which may arise.

Feeders generally can be bought the cheapest in January and the fall months. Thin cattle, bought in the fall, can be carried over on roughages, and made fat for the May, June, July, and August markets, when prices are the highest. Of course, this is the busy time of the year, but the farmer need not take more than time to load and ship the cattle, for his commission firm will care for the shipment just the same as though he were with the stock.

Hogs sell the best in August, while from May to September the prices are good. Fall pigs can be rushed so as to meet the May and June trade, while spring pigs, if fed consistently, as were Mr. Reece's, can be on the August and September markets.

From April to August is the time to market home-produced lambs, while Western feeding lambs, bought during the summer, can reach a high market in November and December.

These points are worth noticing, for they mean money to the man who takes advantage of the seasonable markets.

Pencil and paper are necessary in this business as well as any other. Cold figures don't lie, and they contain an abundance of valuable information. A certain banker said to me about his farm, when I asked him how he was getting along: "As well as can be expected. Farming is not a business that pays unless the owner is able to give his attention to details."

The experiences of Wilson and Reece, as well as that of other feeders whom I will quote, bear out the remarks of the banker. If they did not give the details their attention they would not be so successful.

"Take care of the little things and the big things will take care of themselves" is the popular application of the old saying. In the farming business, and especially live-stock production, the way of putting it would be: "Stop the leaks."

While walking through the Chicago stockyards last summer I met Roy Graven of Jefferson, Iowa, who was sitting on a fence, watching some salesmen squabble over the price of a load of cattle which sold at the top price of the day. Being a very young man, —in fact, not much more than a boy—I thought it was his first trip to the yards, and that the bigness of the situation amazed him. I was used to his kind, but inasmuch as I was after some information on those cattle, I climbed beside him to await the seller. In the meantime I started talking to young Graven. Instead

[CONTINUED ON PAGE 17]

What a Little Figuring and a Nickel's Worth of Paper Did

SPEAKING of successes and failures in the stock-feeding business, Delohery quotes a certain feeder as saying:

"When I bought these hogs I figured out their rations for different times in the feeding period. I took their weight into consideration at the time. Before I finished I had used up a tablet and a few hours' time, but I figured that by using commercial feeds I could save a lot of corn. The hogs made me $1,700, but I had only figured that I would make $1,400."

Delohery adds this comment:

"That nickel's worth of paper, and probably $1 in labor and time, was worth the trouble. If we had more fellows like that in this business, who think and plan before they go ahead, we would have fewer failures."

This bunch of hogs made their owner a good profit because he didn't let them eat up the profits while they were being fattened for market

Health Unbought

The story of a man who at thirty-five was a physical and mental wreck, and at forty never felt better in his life

By Darwin Hobb

When my wife awakened me I was feeling strangely refreshed

IT IS amazing to me how many farmers take such good care of live stock and property, and pay so little attention to themselves. But it shouldn't amaze me, for I have done it myself, and I have paid the price.

I hope what I have to say won't sound like a preachment, or an argument, because I don't mean it to be that. But I do believe that there are thousands of men among us farmers who are in exactly the same fix I was, and who can get out of it in exactly the same common-sense way I got out of it.

There are many of us, I know, who really have things wrong with them, organic disturbances to which good doctors and surgeons ought to attend; but an examination will disclose those conditions, and I am not talking to those men.

I am talking to the man who works hard on his farm all day and eats three square meals in the savage, gulping fashion in which I ate mine; the man who bolts big mouthfuls of unchewed food and washes it down with strong coffee; the man who looks on his work as a bore and a nuisance, and who sleeps all night in the vile air of a room whose windows are closed in winter against the cold and in summer against mosquitoes. That man is going to pay the price, now or later, and if I can do anything by relating my experience that will head off the heavy bill of health I know is being prepared for him, I want to do it.

I remember one time a friend of mine was at my place from the city. We had been around looking things over, and about noon I said:

"Come on, Bill, let's go up to the house now and have a square meal."

"All right," said Bill, "but tell me, as a farmer, what is your idea of a square meal?"

"A side of fat pork and half a pie," said I, laughing. But I meant it, just the same. Bill looked rather pained and surprised, but I attributed it to his finicky city ways, and said nothing about it.

I now know that Bill was exactly right. To-day if anybody told me that a square meal consisted of a side of fat pork and half a pie I'd read him the riot act.

But whether you find anything of positive value in my experience or not, whether the system I used to regain my health looks good to you or doesn't, there is one thing I would beg and plead with you not to do, no matter what the trouble is with you: Don't get the patent-medicine habit.

If there is something the matter with you that is worth taking medicine for, it is worth while going to a first-class physician for treatment. And no matter what is wrong with you, it is dangerous and costly business to dose your system with the whisky and opiate concoctions masquerading under the general name of patent medicine.

I am sure there isn't a healthier man in this State to-day than I am. Yet five years ago this winter I was on the point of selling out and quitting, ready to quit and call myself a failure on account of ill health after fifteen years of farming. I was spending more money on doctors and medicine then than I spend to-day on gasoline. I was discouraged and sick—or thought I was, which amounts to the same thing.

Like the average man, I didn't think much about the care of my personal machinery until it began to run down. This happened when I was about thirty, and men who ought to know tell me that it is at or near thirty that most men who have been careless of their living habits begin to go to pieces. They get stomach trouble and kidney trouble and tooth troubles and all kinds of troubles. Now, don't laugh when I say tooth troubles. A blind ulcer on a tooth root can and does cause rheumatism, lumbago, and all sorts of misery-provoking things.

Just in this connection I heard of a woman the other day who had been in miserable health for years. She was about forty. Doctors couldn't find a thing the matter with her. Finally one of them sent her to a dentist. She had never been to a dentist in her life, but she went and told her story to the dentist. He looked at her teeth and said:

"Madam, to all appearances you have as fine a set of teeth as I ever saw. There isn't a filling in them and not a single decayed spot nor blemish. But you go to an X-ray specialist and have your jaw X-rayed."

She went, and the X-ray disclosed a blind ulcer at the root of every tooth in her head, thirty-two of them, and every one of them discharging a teaspoonful of pus into her system every twenty-four hours. The woman had all her teeth extracted, and when her doctor saw her three weeks later she was feeling fine and had gained twenty-five pounds in spite of living on a soft diet while her gums healed.

But I'm getting away from my story.

Up to my thirtieth year I seemed to be running all right. And I didn't go all to pieces at once. I just gradually petered out. I was never actually sick so I had to stay in bed. I worked every day, but I took no interest in what I did. It seemed plain drudgery, and I got so I hated it. I was always feeling tired and discouraged, and when a man feels that way nothing can interest him. I thought at first it was because I had been sticking too close to the farm, but I took a trip to the mountains and came back feeling worse than ever.

Then I contracted the patent-medicine habit. And let me say to you that the patent-medicine habit and the whisky habit and the cocaine habit are all cut from the same pattern. They sap a man's strength and vitality in the same underhand way.

During my addiction to this habit I bought almost every brand of patent medicine made—and it's a wonder their combined poison didn't kill me! Whenever I saw a new one advertised I would buy a bottle of it. It's these ads that trap a man. They're so cunningly worded that you imagine they are aimed directly at you. They generally name a long list of ailments, such as almost everybody feels at one time or another, and they wind up by asking: "Have *you* been troubled by any of these symptoms? If so, you have catarrh"—or rheumatism, or tuberculosis, or hardening of the arteries, or whatever else it is that this particular dope claims to cure.

I was their dupe long enough to acquire an assortment of bottles that filled a four-foot shelf. There were "remedies" in that assortment for every disease under the sun. Finally I went to a doctor; and while he couldn't find anything organically wrong with me, he said my system was all run down and gave me a prescription. When I started back home from his office I was feeling lower in spirit than ever before. I didn't put much stock in his prescription: I had lost all faith in medicine.

By the time I reached home I had made up my mind to sell out and move to the city. When I opened the front door I was revolving in my mind the best way of breaking the news to my wife.

However, my wife wasn't home, and the note I found on the living-room table told me she had gone over to a neighbor's house for a visit. While waiting for her to return I picked up a book a summer boarder had left, and began turning the pages. It was a book of poems, and one of the first things I read was this:

> Better to hunt in fields for health unbought
> Than fee the doctor for a nauseous draught.
> The wise for cure on exercise depend;
> God never made His work for man to mend.

At first it didn't make much impression on me, probably because I read it with a preoccupied mind; but I read it through again, and that second line—"Fee the doctor for a nauseous draught"—leaped out from the page at me. I read it over twice, slowly and thoughtfully, then I reached into my coat pocket, took the doctor's prescription, tore it up, and threw it in the fire.

That was the first small episode which marked a turning-point in my life. The second one came a few hours later, while I was getting ready for bed. I had scarcely blown out the lamp before a screech owl cut loose in a tree outside, and I crossed to the window, intending to throw something at the bird to stop his dismal screech.

The window, like everything else on the farm at that time, was sadly in need of repair, and when I threw up the sash the whole thing came out and fell to the ground.

It was a raw, blustery night in December, and I tried hanging a bedquilt over the window to shut out the cold. But the wind blew it down, so I went to bed with an icy gale blowing over me. All my life I had slept with my windows closed. It had never occurred to me to open them, and now I felt quite sure I would not sleep a wink, and that I would catch my death of cold.

But I slept like a rock—more soundly, in fact, than I had slept in years; and when my wife awakened me next morning, an hour later than usual, I was feeling strangely refreshed. Heretofore I had always arisen with a dull headache and a bad taste in my mouth, and entered upon my day's duties in a listless, half-hearted fashion.

As if by magic, all [CONTINUED ON PAGE 20]

Hobb's Own Recipe for Health and Happiness

DARWIN HOBB gulped his meals of fat pork and pie, slept with his windows shut, and worked like a dog all day on his farm. He didn't get any fun out of life. At thirty-five he was a physical and mental wreck. He tells how he got out of all that, and why he is healthy and happy and prosperous to-day. It wasn't the medicine he took nor the doctors he saw that cured him, either. A poem had something to do with it. But there were other things, too—things within reach of most of us common folk. Read the story and learn them.

THE EDITOR.

We Have Just Begun to Fight

For the next five years it will be the American farmer's battle to feed the world and perhaps save Europe from anarchy

FARM AND FIRESIDE
The National Farm Magazine
Founded 1877

Published Monthly by
The Crowell Publishing Company
Springfield, Ohio

HARRY M. ZIEGLER, *Managing Editor*
ASSOCIATE EDITORS:
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By subscription 25 cents a year, three years 60 cents, or five years $1.00. Single copies five cents. Canada and Foreign Countries, 25 cents a year extra.

Farm and Fireside guarantees that its advertisers are responsible and honest people, and that its subscribers will receive fair and square treatment.

DECEMBER 1918

AS WE go to press with this number, the war is rapidly fizzling out. Bulgaria, Turkey, and Austria quit cold. Dutch Willie and his gang of thugs are on the skids.

Your boy who went across, your boy who stayed at home, you yourself and your wife and the girls, helped bring this glorious dawn of peace. But what we hasten to say is, don't be carried away by the excitement of the moment. Much waits to be done.

The entire civilized world, especially America, and particularly the American farmer, faces a struggle during the next five years the success of which is next in importance only to the winning of the war itself. We mean the struggle of getting Europe quieted down and running smoothly again, after the actual fighting is done.

The success of this colossal undertaking—and it *is* colossal, as we shall show—depends primarily on *food*. The production of this food is peculiarly the American farmer's problem. Therefore much depends on *you*.

No doubt you would think it strange if a man came to you to-morrow and said: "Now don't get excited about the ending of this war. *Your* boys are not coming home much under a year, if then; nor are *any* of the two million soldiers we've got over there. And if we're going to keep Europe from turning into a seething caldron of anarchy *you've* got to get busy."

He would tell you true. A Washington newspaperman, Mr. David Laurence, who is perhaps closer than any other writer down there to the men who actually know what's what in the international situation, made this very interesting statement in the "New York Evening Post" the other day, which we would all do well to take to heart:

"Amid the thrills of joy at the approach of victory and the triumph of democratic ideals, there are signs of worry and concern. There is a fear that the days of peace may bring more suffering than the days of war. Peoples have submitted everywhere to centralization of power in their governments. Private interests have subordinated everything to the public weal. Now comes a return of competition, especially in the necessaries of life. The world cannot begin producing sufficient food, for instance, immediately after peace is declared, to feed everybody. Regulation of some kind must continue, else the Allies, in their anxiety to feed their people, will create a demand that will send prices sky-high in America. The German people will be clamoring for food, and with the crumbling of her present government, she will be left to the mercy of the outside world. Some vengeful persons think this would be a splendid fate for Germany anyway, but the people of France and Great Britain are not so sure about it, for a hungry Germany will mean anarchy.

"The return of the German troops, who have been better fed anyway than the civilian population, will mean riots and disorders if there is no food. And anarchy in Germany may mean disorder in the Entente countries adjacent thereto, for Bolshevism is contagious. The danger to Europe of Bolshevism is being widely discussed here, and in the question of food regulation do many people think the solution lies.

"America has been feeding the world, has been obeying a conservation and production program with patriotic zeal, and has been controlling the demand by agreeing with the allied governments as to the price of their purchases and amounts to be given them. If this power of regulation disappears, what will be the result for the American householder, whose cost of living is rising already to unprecedented heights?

"*The answer to the question of disorder abroad is in keeping the civilian population contented by giving them enough to eat.*"

By giving them enough to eat—that's where the American farmer comes in.

Already the Food Administration is plastering the fences and signboards of towns and cities with the appeal, "Don't Stop Saving Food!" And to the American farmer it turns, as spokesman for a hungry, war-weary world, and imploringly shouts: "Don't Stop *Raising* Food!"

The labor problem will not be changed much for you for a year or more, at least; so don't count on that. It will take nearly a year to get the boys home even after they start, and there is no prospect that they will start for many months to come. Concerning this, Thomas M. Johnson of the "New York Evening Sun," who has shown that he has a very clear grasp of the situation overseas, recently had this to say about that situation:

"Even with peace signed it would be a long time before the American Army could see the Statue of Liberty again. This is because there may be plenty of work for American soldiers in Europe long after the actual fighting ceases. There is almost certain to be much police duty to be done there for quite a while, in which American soldiers will have to take their part—perhaps a large part.

"One notable reason why the Americans may take an especially large part in this work is not only because we have now great numbers of troops in France, but that we can better afford than any of our Allies to keep them mobilized.

"It is likely that as soon as the fighting is surely ended there will be a great popular demand from all the allied countries, especially France, for the early return of their soldiers to the work at home from which they have been absent for four years.

"Furthermore, the industries and the farms of France and England alike are badly in need of workmen who have long been in the army. The quicker they can return to work the quicker these nations can become self-supporting and decrease the demands upon the United States for food supplies. The United States, on the other hand, can far more easily stand having its soldiers remain away from home a while longer.

"The police duty is likely to be of rather long duration, aside from the question of occupying ground of military importance, because of the wide-spread feeling that the Germans must be forced to make restitution for all the damage they have done to northern France and Belgium —must be forced to return all stolen machinery, goods and household effects, or else replace them, besides paying back every cent levied upon conquered cities. The pressure of an ever-present armed force would greatly hasten the Germans in this slow work of enforced restitution."

We are now getting together a clear, authoritative, and forceful statement of the international situation and the task it places on *you*, together with a clear outline of the best way you can go about doing it. We mean to deal with this subject in as helpful and informative a way as possible, so it will, probably, not reach you before February, as careful work takes time; but we believe it will be worth while when it comes.

Aside from his share in the big, immediate problem of helping get Europe settled down to peace again, the whole after-the-war situation is fairly bursting with big things for the American farmer. One of the biggest of these is the undreamed-of markets that America's great merchant marine will open up to you when peace is fully here, for the first time in the history of the world.

To sort of brighten up the atmosphere and lighten the burden that is imposed on you by the ending of the war, we have asked Chairman Hurley of the United States Shipping Board to discuss what the ships mean to you, to show you how they mean money in your pocket, in the January number. This he has agreed to do.

So that is the way things "stack up" just now. We are going to keep right on top of developments, of which there will be plenty, Heaven knows; and we'll pass the "dope" along as it comes through. In doing this we don't feel like an editor sitting on the throne as a wise man and dispensing gems of knowledge to you folks who read this magazine. We prefer to be a neighbor who drops in once in a while to talk things over. Sometimes we're wrong and sometimes we're right. But at all times we're friendly, and maybe, by devoting all our time to it, we can manage to give you a line on things occasionally that is really worth while.

If there is any point that we have missed, ask us about it. If in anything we have erred, tell us so. These are big days in the history of the human race, and it's up to all of us to do what we can to help the other fellow along. Sincerely yours,

The Editor

P.S. The map of the world is being remade as a result of the war, and in the process we farm folk, in common with the majority of city and town folk, are discovering that there were many parts of the old map that we didn't even know existed, and millions of human beings living on those parts that we didn't even know were on earth.

That is one good thing the war is doing for us. It is forcing us to learn something about the whirling globe we live on. All too much of the strife and misunderstanding in the world comes about through people not knowing enough about each other, not understanding each other, and not caring to. The consequence is that when a "tiff" comes up we don't know anything about the other fellow, and he doesn't know anything about us, and we start to straighten things out all at cross-purposes.

President Wilson said in a speech recently that the only way he could thoroughly disagree with any man on any subject was to keep that man at a distance where he couldn't talk to him and understand him. The war is taking the people of the world up to each other's front doors and sitting them down around the fireplace; and the net result is going to be that after the war we're going to have a lot more knowledge of what sort of place the world in general is like, and a far greater sympathy and understanding for the people in it.

That is why we believe it is a good thing for farmer folk, when they read in their daily paper something about the Czecho-Slovaks and the Murman Coast, or about the Portuguese, or about the Finns, or the Junkers, or the Jugo-Slavs, they look them up on the map and in the geography or encyclopedia and get acquainted with them. A farmer of our acquaintance spent considerable time very profitably looking up his books to answer these questions.

As a rule, most of us are rather careless readers. Time presses, especially with the farmer; and yet it is decidedly worth while to pay some attention to the great undercurrents that are sweeping on in our day. To read your paper with a geography, a good dictionary, and a workable encyclopedia at your side is a good road to a liberal education. This is not less true of the adult farmer than it is of the young folk, who do not as a rule get very deeply into these matters in the course of their everyday studies.

Nor is the knowledge thus gained all the advantage gained. These are strenuous days. We come in from the field tired and sometimes a bit disheartened. A little while of reading the daily paper and of delving into the mines which every issue suggests will surely bring relief to the weary body and send a man back to his work with new things to think about, and inspire him to believe that the great drift of humanity is, in spite of all, upward and outward toward better things. Great things are happening now. He is a wise man who keeps abreast with them.

For Your Boys—and Mine

Not to be cheated out of an exciting rummage sale by little things like blizzards and late trains, the inhabitants of the Osceola plan one all their own

By Christine Whiting Parmenter

YOU wouldn't think, offhand, that you could get on a train for Boston and go all the way to France, would you? But Christine Whiting Parmenter, a new and very promising writer in FARM AND FIRESIDE's world of fiction, makes you to do just that in this story. Physically, you are whizzed into Boston safe and sound out of the teeth of a snowy blizzard. But meantime, while you are plowing through the storm, your spirit has been whisked away to the heart of the war "over there," and you find yourself on terms of personal friendship with all your fellow travelers. How Christine managed to do this, living in Colorado Springs, Colorado, as she does, we don't know. But she did. THE EDITOR.

THE NOON train from New York to Boston was an hour and fifty minutes behind time. A freight smash-up somewhere beyond Bridgeport had delayed it an hour and a half. Then, later, it had run on to a siding to give right of way to a special. And all the time the snow was falling with a quiet, steady persistence that would have discouraged the most optimistic clerk in the weather bureau.

It was between Springfield and Worcester, just as peace seemed to be descending on the weary passengers, that something happened to the engine, and the train came to a dead stop at a spot that might have looked, to one bred in the city, like a snow-swept prairie. As the engine came grindingly to a halt, a "commercial gentleman" in the last seat of the smoker yawned wearily before straightening up to look out of the window.

"Some storm!" he commented to his nearest neighbor. "Guess I'll get out and stretch my legs a bit."

He rose, turning up his collar and settling a brown derby firmly on his bald round head. As he took a step backward he stumbled over a suitcase that protruded into the aisle from the seat across the way, and, turning, glared for a minute at a boy in khaki, who had been smoking innumerable cigarettes ever since he came aboard the train at Hartford.

"Well, what in—" His tone changed suddenly at something he saw in the boy's face. "Say, kid," he went on good-naturedly, "you won't have no insides left if you don't quit smoking those poisonous cigarettes. Come out and take a turn in the fresh air. There's nothin' like a bit o' cheerful conversation a day like this."

The boy, after a moment's hesitation, pulled his hat more firmly above his ears and followed his genial acquaintance to the platform. They stood for a minute looking out at the flying snow, and then, regardless of wet feet, stepped down into the storm and made their way toward the back of the train.

"Gettin' back to camp?" asked the drummer sociably.

The boy nodded and gave the number of his regiment.

"Drafted?" shouted the drummer into the teeth of the storm.

"No—enlisted," said the boy.

The man looked at him sharply.

"Any family?" he questioned briefly, after a minute.

"Only—a girl," the boy answered, the red creeping into a cheek as soft as a woman's.

"Oh!" said the drummer, and walked on in silence. He was thinking that, young as the boy looked, he himself had been married at twenty-one. She had been nineteen. He remembered how—

"Say," he turned quickly and faced the boy, "it's hard, ain't it?"

His honest sympathy brought something that sparkled on the boy's lashes.

"I—I've just been to see her—to say good-by," he stammered awkwardly. "That's why I smoked so much; I couldn't think of anything else to do."

"Lord!" ejaculated the drummer. "Lord! Those beasts of Germans— Look out, kid; the train's movin'. Catch a-hold."

THEY swung aboard, and, as the door of the day coach slammed behind them, stood for a minute, stamping the snow from their boots and brushing their clothes. The car was not crowded. Two seats ahead, a placid, gray-haired old lady was knitting a khaki-colored sweater. In front of her two girls of the "flapper" age were giggling over the comic section of the paper. Toward the middle of the car a weary salesman (he dealt, it was discovered later, in a fine quality of "gent's underwear") occupied two seats and slumbered the unquiet slumber of the exhausted.

As the boy in khaki started up the aisle he felt a detaining hand upon his arm.

"I wonder"— it was the voice of the old lady with the knitting—"I wonder if you'd mind tryin' on this sweater. Abby said she'd put those Red Cross directions in my bag, but they ain't here, and I can't remember whether it's twenty-six inches or twenty-four they make 'em now; an', bein' a soldier, I thought maybe you'd try it on. I was kind of plannin' on finishin' it before I got there."

"Well, I guess you'll have *time* enough," said the drummer genially. "I'm blamed if this darn train ain't stopped again. Looks like a pretty good fit to me, ma'am," he went on as the boy squirmed obligingly into the unfinished sweater. "Well, so long. I'll get back to my seat an' see that that old college professor across the aisle don't steal my grip."

The "flappers," who were frankly listening to the conversation, nudged each other in appreciation of his wit, and cast admiring eyes at the boy in khaki.

"It tears my heart, ladies and gentlemen, to see this gem sacrificed at such a price. Hasn't anyone a wife, a mother, or a sweetheart—"

"I'm ever so much obliged," the old lady remarked gratefully as she resumed her knitting. "I'm on my way to visit my daughter Lucy in Salem. She's feelin' kind o' low in her mind just now on account o' Calvin's not writin' since he landed. He's her oldest. He was with the first troops to go, and as good a boy as ever lived. She thinks somethin's happened to him sure; but I says: 'Land, Lucy, they don't have proper writin' materials in those trenches. Like as not he's no way to get a postage stamp, or maybe those Germans have got a-hold o' the letter and are keepin' it just for spite. I wouldn't trust one of 'em round the corner with a toothpick.' If you'll slip into this again in about ten mimutes I'll be real obliged."

The noon train boasted two Pullmans, a dining-car, day coaches, baggage cars, and smoker. In the first of the Pullmans, in the seat at the end next the smoking compartment, was a white-haired, stern-looking old gentleman who had been sitting for hours staring alternately into the storm and at an envelope which he held tightly clenched in his right hand. The next three chairs were vacant; but the two adjoining were occupied by Wellesley College girls returning from the Christmas vacation. Across the way was a Harvard freshman who kept his eyes with alarming persistence on one of the girls from Wellesley, the dark-haired one, who, apparently oblivious of his rapt gaze, was deeply absorbed in Mme. Huard's account of her "Home in the Field of Honor," while her companion beguiled the time by knitting a Red Cross muffler.

Farther down the aisle sat a discontented-looking woman of about fifty, handsomely dressed, her much bejeweled hands clasping a vanity box; while next her was an eminently respectable Episcopal clergyman in spotless broadcloth and highly polished finger nails; and, lastly, a sour-looking, discouraged little gentleman who had once published a small volume entitled "Good Cheer for Every Day."

This completes the list of the occupants of the Pullman Osceola. Her sister car, the Geraldine, carried an even lighter burden, consisting of a New York millionaire of uncertain age and reputation, a Boston banker still young and good to look upon, a woman doctor, a stout gentleman whom the doctor suspected strongly of being a German spy, and two small boys traveling in care of the conductor, to be met by their "Aunt Hattie" in Boston.

OUR friend the commercial gentleman rarely went to the extravagance of a Pullman on his short trips. Being a genial fellow, however, he liked to know with whom he was traveling; so, after assuring himself that the college professor was harmless and his grip safe, he made his way into the Osceola, after exchanging friendly witticisms with the colored porter in the vestibule.

"Great day," he remarked sociably to the Harvard boy, whose glance had strayed from his inamorata for a moment. The boy colored, hoping devoutly that the girl from Wellesley would not mistake this person of doubtful respectability for one of his family friends; and, while debating within himself as to whether or not he should reply, the commercial gentleman, undaunted by his silence, continued:

"I've been talkin' with the conductor. He says this is the worst storm in ten years. Shouldn't be surprised if we don't get into port before midnight."

To the astonishment of the Harvard boy the girl from Wellesley laid down her book and leaned forward.

"You don't mean that we won't reach Boston tonight?" she said anxiously, addressing the drummer in such a frank and friendly manner that the Harvard boy felt a twinge of shame at his own snobbishness.

"Likely not, Miss," replied the drummer promptly. "The engine's out o' commission, and the snow's pilin' up higher'n a haystack. 'Twouldn't surprise me none if we stuck right here till mornin', an' I've traveled this territory, off an' on, for thirty years."

The girl looked anxiously at her companion, who yawned and stretched lazily as she laid aside her knitting.

"Why worry?" she smiled, showing remarkably pretty teeth and a dimple in one cheek. "It's not our fault if the train gets stuck in a blizzard. I guess that war relief rummage sale can exist without you—though I know you're dying to appear as a Red Cross nurse."

The other girl colored; but the Harvard boy, seeing a heaven-sent opportunity, grasped it.

"Were you to assist at the war relief rummage at Wellesley to-morrow morning?" he asked eagerly. "Perhaps you know my cousin, Dolly Jackson? She's going as a Red Cross nurse too. She's crazy about her costume."

"*I* know her!" exclaimed the girl with the knitting. "She had the room next mine in Wood her sophomore year. I know her as well as I do my own sister."

"Well, now," said the commercial gentleman, smiling at them benignantly, "ain't that pleasant? I tell my wife that if folks would quit bein' bashful an' speak more friendly together the world would be a lot pleasanter place to live in. I'm sorry you'll miss that rummage sale, young lady. You'd make a right cute-lookin' nurse. But, say, what's to interfere with havin' a rummage sale of our own? There must be enough junk on these passengers to raise a good-sized sum for the boys in the trenches."

The three young people stared at him a moment, and then the girl with the knitting exclaimed:

"Why not? It would be a perfect lark! We'll interview every passenger on the train, as well as the trainmen and the paper boy. If everyone gives something, and we get someone to auction them off—"

"That's the talk!" broke in the commercial gentleman eagerly. "That's the way I like to see an idea took up and carried out! There's no reason—"

"Say," interrupted the Harvard boy excitedly, "we'll have to have a committee or something, won't we?"

The dark-haired girl laughed, [CONTINUED ON PAGE 21]

The Mystery at Glen Cove

Between shadowing strange women, gathering in the ragged ends of clues, and deciphering puzzling maps, Jimmy is kept busier than he likes

By Howard Vincent O'Brien

TIMIDITY made me cling to each rod and bar of the fire escape as if it were the last between me and eternity. But suddenly I forgot all consciousness of self. I dropped to the ground and made for the entrance to the Trevonia. I had seen a woman emerge from the building. She was heavily veiled, but there was something in her figure and gait which was strangely familiar. I racked my brain to recall where I might have encountered her, but all my efforts were futile.

At Park Avenue she hailed a taxi. As it drew up beside her I was momentarily nonplussed.

I searched the street desperately for another taxi. There was none to be seen. I meditated upon the practicability of climbing on behind her car. Then I descried an empty limousine coming down the street. It was my last chance! Assuming all the "up-town" manner at my command, and striving, in its haughty mantle, to conceal the disrepair of my attire, I hailed it.

When I made clear to the driver that compliance with my modest request would mean an appreciable increase in his income, the privileges of the fourteen-inch curled hair cushions were extended to me.

With a jerk of the thumb he sped me into the seat behind him, and we shuffled through the traffic in pursuit of the fleeing taxi.

It drew up at a small and rather exclusive hotel on Forty-fourth Street, and the lady descended. Leaving my endowment with the the obliging driver of the limousine, I darted—if that verb may reasonably be applied to one of my dimensions—in pursuit.

I was baffled, however, when I saw her enter the elevator. I knew that if I lost sight of her then, all my previous good fortune would go for naught. On the other hand, if I joined her in the elevator she might recognize me and be placed upon her guard. But Fate, for the moment, was my friend. A party of new arrivals, with a gratifying amount of bulky luggage, came bustling in. I took a great chance, and at the last moment squeezed myself in after them. I kept my face averted, praying that in the darkness and crush I would not be observed.

At the sixth floor she got off. I waited until the gate had clanged behind her. Then, with muttered apologies, I conveyed to the operator that it was my floor also.

A hasty glance down the hall revealed my quarry just turning the corner. I almost broke into a run, and it was fortunate that I did, for I had just a fleeting glimpse of her before the door of 617 closed quietly behind her. I was left wondering as to my next move.

It would be folly to delay action. On the other side of that door lay, in all likelihood, some sort of clue to the great mystery. With a firm enough hand but with a trembling heart, I knocked.

There was a moment's pause. Then I heard a key turn in its lock, and the door opened a few inches. Instantly I inserted my foot in the aperture. At the same time I was conscious of a frantic effort being made to close the door.

"May I speak to you a moment?" I asked as urbanely as the circumstances would permit.

There was no reply. I put my shoulder against the door, exerting all my weight. It gave an inch or two, and I heard a grinding sound, which gave me to understand that the quick-witted occupant had placed a chair against the knob.

The fact that the door had been opened at all indicated that the lady was not suspicious of danger. But that she had closed it so quickly upon hearing my voice and catching a glimpse of my face intensified my conviction that I was not a stranger to her.

"I really must speak to you, you know," I declared. "I am determined!"

There was still no reply. I heaved at the door with all my strength. It creaked and groaned, opening a little further. One more thrust would do, I thought exultantly. Again, bracing my feet firmly, I thrust forward. With a crash and a sound of splitting wood, the chair suddenly gave way and I fell forward on my knees!

Before I could rise, strong arms had seized me from behind, and I was pinioned in a grasp which left me powerless. Simultaneously I heard the door slam, and the key turned in the lock. Then a thick Irish brogue was inquiring in my ear as to what the devil I thought I was about.

I was in the hands of a burly baggage porter who glared down at me as if the prospect of my extermination was extremely gratifying to him.

It was an extraordinarily awkward predicament in which I found myself. Explanations would be difficult to make.

I tried to intimate, in a feeble voice, that a mistake had been made. He merely sneered. Then I tried the lure of gold, only to receive a wrench of the arm which made me wince.

I was marched to the freight elevator, and presently conducted to the manager of the hotel.

Briefly, my captor related the circumstances of the affair.

"Well?" I asked, when the manager remained silent after the porter had finished his story. "What do you propose to do?"

"Turn you over to the police, of course.'

"Turning me over to the police is a very natural, almost conventional, procedure," I assured him. "But, my dear fellow, how *very* unwise!"

My cheerfulness plainly puzzled him.

"Say, where'd you get that stuff—unwise?" he asked irritably.

"Well, consider this: will it help your charming hostlery for the newspapers to publish more or less inaccurate accounts of the peril to which lady guests are subjected within its walls? Furthermore—"

"Oh, is that so?" he sneered. I could see that he was weakening.

"Furthermore," I went on imperturbably, "the lady involved will refuse to prosecute. In fact, the chances are that she will be leaving your hotel within the hour."

"What makes you think she won't prosecute?" he demanded.

"Because ladies in general have no fondness for notoriety, and because that lady, in particular, has the best sort of reasons for wishing to avoid publicity of any sort."

"You know her?"

"If you must ask foolish questions, my dear fellow, do me the honor, won't you, of asking them of someone else?"

The manager made some unintelligible reply, and fell to drumming on the desk with his pencil. It was plain that he was undecided. An inspiration struck me.

"If you doubt my insight into feminine nature, why not call her up and ask her what she wishes done with me?"

He hesitated, eying me narrowly as if suspicious of some further plot against the peace of his inn. Then he turned to the telephone.

"Give me 617," he ordered brusquely.

We waited in silence. At length, after several minutes, I chuckled.

"You see, I guessed right. She's already gone."

He grunted angrily.

"Give me the room clerk," he rasped into the instrument. . . . "Say, Henry, what do you know about 617?" There was a pause. Then he hung up the receiver and turned to me, little furrows of bewilderment between his eyes. "She checked out ten minutes ago!"

I enjoyed a moment of mild triumph. Then I took my purse from my pocket and tossed a bill on the desk.

"That ought to cover damage to your equipment. And now, unless you still wish to turn me over to the police, I shall bid you good morning."

I bowed, and put on my hat. I was almost to the door before his sharp voice recalled me.

"Say," he demanded with a new tone of respect, "who are you, anyway? You've got me right," he confessed candidly. "Are you a—a detective?"

"Possibly," I murmured.

At the threshold I hesitated, as if halted by an afterthought.

"By the way, old man, what was the lady's name?"

He surveyed me mistrustfully.

"I thought you knew her."

"I do. I merely wondered under what name she registered."

"Blount," he muttered reluctantly. "Mrs. A. Blount, Rochester."

"Thank you." I bowed and went out.

On the street I paused, whistling exultantly, oblivious to whoever might wonder. The nonchalance with which I had undergone my grilling by the manager had been in no way feigned. Nor had my forecast of the lady's actions been mere guesswork.

I was happy because I had accomplished, if not all, at least a large and important part of what I had set out to accomplish.

I had discovered the identity of the mysterious, veiled woman!

When the door had given way before the last lunge of my shoulder, and just before the porter had seized me from behind, I had caught an instantaneous glimpse of the lady's face. There was no possibility of a mistake.

The occupant of 617 was Marie Brandt!

It was imperative that I submit a report of my efforts to Steele without delay. But I was at a loss to know how to find him. Even if the fellows in whose company I had left him were nothing more than ordinary detectives, they had given every evidence that their aims and methods were very far from ordinary. If Steele were under arrest, any efforts to locate him through the regular channels would be worse than useless.

Wherever he was, and whatever he was doing, it was clear that I was to know only when he chose to have me. In the meantime there was nothing left for me to do but to return to Glen Cove and await developments. That, I recalled, had been his parting injunction to me.

I went first to my own lodgings. Not finding any word there from Steele, I hurried over to the Debretts'. They, too, were entirely in ignorance of his whereabouts. The state of my clothes naturally inflamed their curiosity, and I was obliged to satisfy them [CONTINUED ON PAGE 31]

Before I could rise strong arms had seized me from behind, and I was pinioned in a grasp which left me powerless

What Has Gone Before

AFTER a dinner at Admiral Debrett's home, Carter, a stranger to all present except the young débutante, Agatha Burchard, is called to the telephone by the Chinese butler, Toguchi. A moment later all of the lights go out. Just as they flash on again, a gasping sound is heard in the telephone booth. When the guests rush in they find Carter unconscious. He has been shot. Marks on his throat show that someone has attempted to strangle him.

During the excitement Marie Brandt, an attractive young widow, disappears. While examining Carter, Steele, a young bachelor, hears a machine leaving the grounds, and he and his friend Jimmy start in pursuit. But someone has put thumb tacks in Steele's tires, which cause a blow-out, leaving them stranded miles from town.

They force the driver of a limousine, which approaches at a terrific speed, to stop and pick them up. Later, when stopping for gas, the occupant of the limousine asks to speak to Steele. She thus separates them, and as she kicks Steele over into the mud the chauffeur throws Jimmy from the seat beside him and makes a getaway. They spend the night at an inn, and when leaving the next morning are followed by two men whom they think they succeed in eluding.

They go to an apartment house where they believe some clue to the attempted murder is to be found. In one of the bedrooms they find a man who has been chloroformed, and Steele sees a woman sneak out of a room at the end of the hall and leave the apartment. Jimmy starts in pursuit of the woman just as the two men arrive and take Steele in hand.

Handling Barbed Wire

By R. W. Taylor

WHEN building fence, every farmer knows what it means to lug a heavy spool of barbed wire from one end of the field to the other, and any method of lightening this task is appreciated.

Here is a description of a device which I have used for a number of years: Procure from your hardware dealer 9½ feet of ½-inch galvanized gas pipe, and four elbows of the same size. Cut this pipe into two lengths of 4 feet each, which will leave one

short peace 18 inches long. Thread these three pieces on each end. Run the short piece through the spool, and screw an elbow on each end. Into these elbows screw the two 4-foot lengths, and put an elbow on each end to finish out the handle.

With this outfit one man can easily roll the spool along the fence line. To change spools, simply unscrew the elbow from one end of the short length.

Use for a Mattock

By E. V. Laughlin

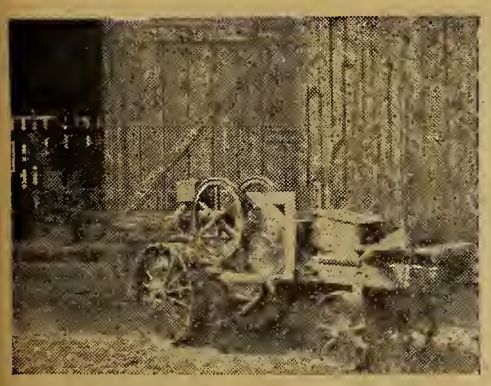
IN TEARING down old buildings, either brick or frame, my experience is that no tool is superior to a mattock. Especially is this true if the structure is frame and it is desirable to remove the lumber without splintering or breaking it. Used properly it becomes a giant claw hammer. The hoe part, owing to its relatively broad surface, enables the operator to press off the boards without splintering them around the nails; the ax part makes a good fulcrum; while the handle, if it be strong and of usual length, provides a lever that has great prying strength. For removing siding, weather-boarding, sheathing, or prying loose firmly nailed timbers, it is far better than the curved wrecking bars that constitute a part of every carpenter's kit of tools.

I find the following method of using the mattock the one that gives best results: The hoe part of the tool is inserted under the edge of the board that is to be pried loose, if possible between it and the timber to which it is fastened; a gentle backward or forward bending of the handle invariably starts the board, giving an opportunity to obtain a better "bite." A repetition of the movement a time or two enables the operator to press the board entirely free from its fastenings. Generally it will be found that the point of the ax bears just right to furnish the best kind of a fulcrum. A little trying and fitting will enable the operator to discover the position that renders the tool capable of doing the most efficient work.

Novel Home-Made Tractor

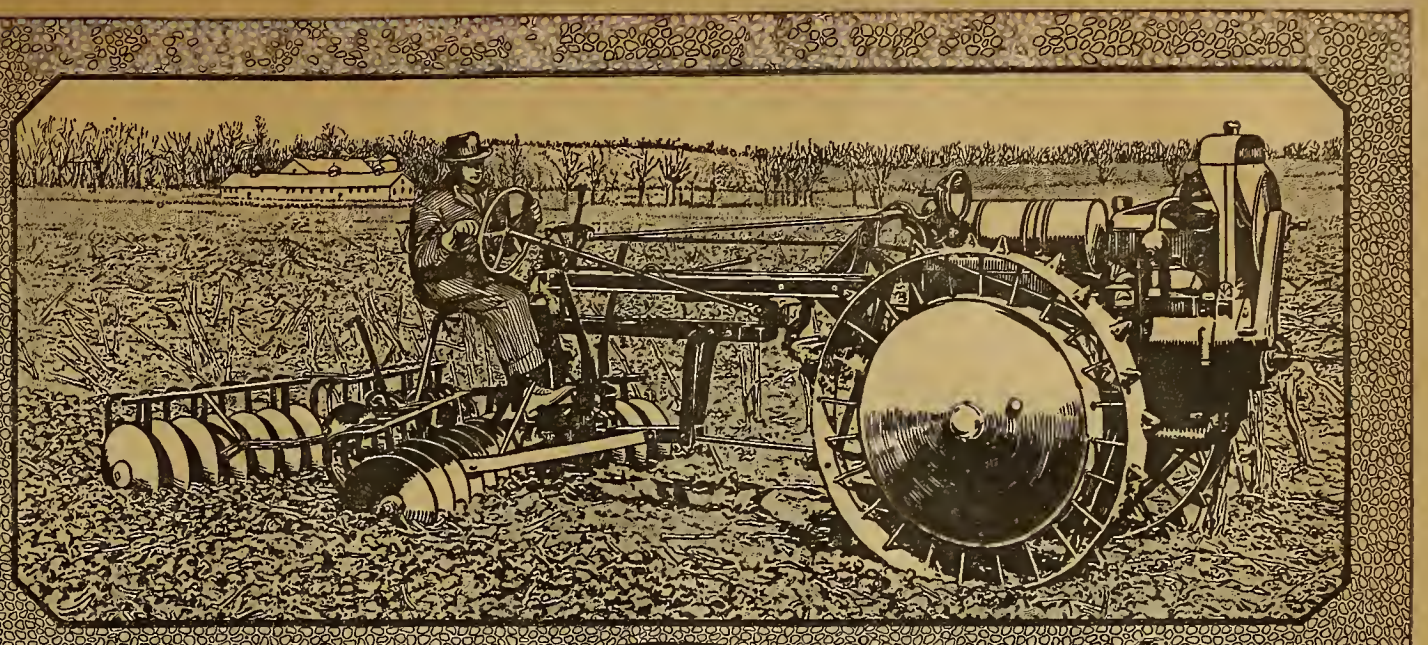
By Frank C. Perkins

THE accompanying illustration shows a home-made gasoline tractor, equipped with a 5-horsepower engine. It operates a 7½-horsepower grinder at full capacity, grinding 15 to 25 bushels of small grain or ear corn per hour. It uses about four gallons of gasoline for each ten hours' work.



This home-made tractor grinds 20 bushels of ear corn per hour

On one occasion this tractor traveled three miles and sawed 14 cords of dry sugar cord wood in five hours and twelve minutes and returned home, using only four gallons of gasoline. This home-made tractor can travel six miles on one gallon of gasoline. It has a drawbar pull on level ground of 300 to 400 pounds, and requires about 20 feet to turn around.



Moline-Universal Power Lift Gang—Extra strong construction, simple power lift operated by foot lever, equipped with quick attachable shares and combined rolling coulters and jointers. In average soil conditions this outfit will plow 9 acres a day.

Moline-Universal Disc Harrow—Strongly constructed with 18-inch blades. Each gang has 3 large dust-proof bearings equipped with wood bushings. Easily and quickly adjusted. Built in 6 and 7-ft. sizes double cut, or 8, 9 and 10-ft. single cut.

Moline Grain Drill—Operator sits behind the drill where he can see work being done. Furnished in a great variety of sizes either as plain or fertilizer drill. Deposits seed with unvarying accuracy. Equipped with either single or double disc furrow openers.

Moline-Universal Two-Row Cultivator—With this outfit 10 to 20 acres a day can be cultivated. Entire outfit easily handled. Tractor speed easily regulated from ½ to 3½ M. P. H. Cultivator is extra strong and has pendulum foot gang shift.

THE TRACTOR
for ALL Your Work AND ALL THE IMPLEMENTS to Do It With

Mr. Nile Kinnick of Adel, Iowa, operates a 400-acre farm and all the work is done by two men, two Moline-Universal Tractors and one team of mules. This is what he says about the Moline-Universal:

"I was agreeably surprised with the ease with which we could cultivate corn, and for harvesting it far surpasses horses or mules. It appeals to me as an ideal tractor. It will actually replace horses, something that most farmers must consider when they plan to buy a tractor. The ease with which it is handled and the advantage of operating the outfit from the seat of the implement are facts that cannot be appreciated until one has tried it."

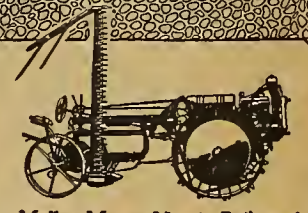
This expresses in a nutshell the advantages of the Moline-Universal. It does *all farm work* including cultivating; *one man* operates both tractor and implement from the seat of the implement; it has *ample power* for heavy field and belt work, yet can be operated economically on light work.

Another big feature that makes the Moline-Universal superior to all other tractors is the complete Moline Line of Implements to be operated in connection with it. This does not mean it is necessary to purchase all of these implements with the tractor, as many horse drawn implements can be used successfully. But it does mean that a Moline-Universal owner can operate his tractor to full capacity at all times and make the best use of the operator's time by using Moline tractor implements. They do better work with the Moline-Universal, are of larger capacity, stronger construction, are designed to run at higher speeds than horse drawn implements, and will pay for themselves in a short time.

For full information Address Dept. 60.

Moline Plow Co., Moline, Ill.

Manufacturers of Quality Farm Implements Since 1865



Moline Mower No. 4—Built in 6, 7, 8 and 10-ft. cuts. The largest capacity mower in the world. Proportionately larger and stronger than ordinary mower. Equipped with spring draft rod. One man operates both tractor and mower.

Moline Grain Binder No. 11—Cuts a 10-ft. swath. Extra strongly constructed throughout. Cuts 35 acres a day. Equipped with power bundle carrier. One man handles the tractor and binder easier than he could a binder and horses.

Moline Corn Binder—A splendid outfit for cutting corn easily and quickly. Power bundle carrier deposits bundles away from the path of the tractor. Strong and durable. One man operates the entire outfit easier than with horses.

Moline-Universal Tractor Attachor—A great variety of equipment can be attached to rear crossbars, so that majority of operations in orchard and vineyard work and cane growing can be performed with this one outfit.

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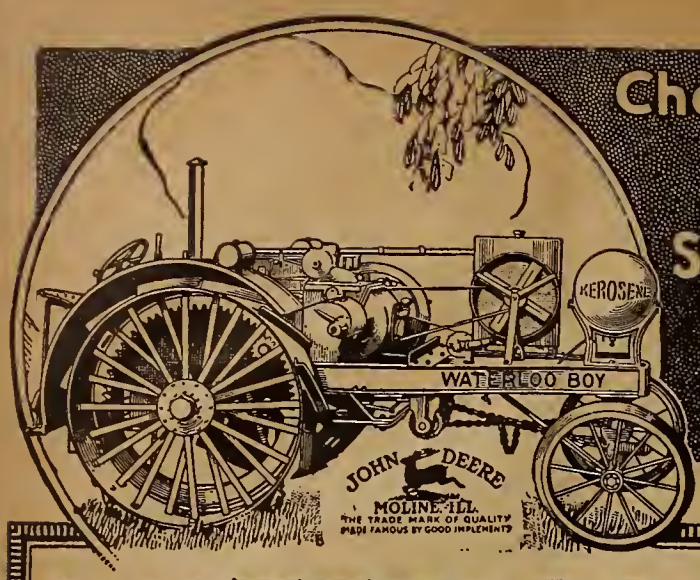

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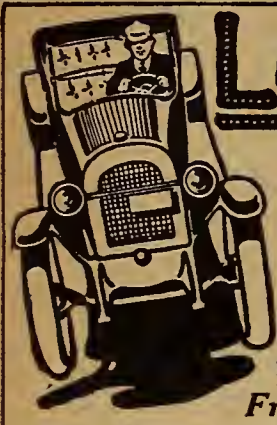

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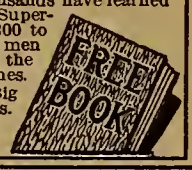

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4 H. P. weighs only 190 lbs., being only 48 lbs. per horsepower. Besides doing all ordinary jobs, it may be attached to any grain binder, saving a team, and in a wet harvest saving the crop. Also it may be used on corn binders and potato diggers. Very easy to move around from job to job.

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Woodrow Wilson—Human Being

[CONTINUED FROM PAGE 5]

and the President said nothing about it.

There are many things about the President's golfing that mark the man. He has no caddie, and he keeps his own score. He plays much as he works—that is, conservatively. He plays 18 holes, and his score averages between 90 and 100. He doesn't drive a long ball, ever, but rather a moderate stroke straight down the course, wasting very few shots on spectacular plays.

Once in a while he invites a friend to golf with him, but unless that friend knows the ropes it is rather a dangerous undertaking. Mr. Wilson, you know, was not at all given to physical exercise of any kind when he entered the White House. He was practically driven to it by Dr. Grayson, and while he is now quite an enthusiast, he still takes his golfing more as a medicine than as a sport, and he plays it according to doctor's orders. One of the orders is that no one must talk business to the President while on a golfing party.

A certain nationally known man, a personal friend of the President's, had golfed with him frequently for about six months, always by invitation. Suddenly the invitations ceased. The man wondered why, and one day he wondered audibly, in the presence of a member of the President's household.

"I will tell you why," said he. "It was because you disregarded the request that you bring up no subject even remotely connected with official affairs while you were golfing with the President." This happened to more than one man.

On another occasion the President was golfing with a high official of a foreign government, when it began to rain. The guest said afterward that the rain beat down on them so hard it actually hurt. But the President kept right on with his game, and both men concluded the round soaking wet.

Asked once why he was so partial to horseback-riding he replied: "Well, you know, the outside of a horse is good for the inside of a man." So he does that for exercise, too. Not long ago, while taking a ride, the President chanced upon a party of soldiers near a camp. As the men swung their rifles sharply to salute, the President's horse reared, wheeled, and ran off down the road, nearly unseating his rider. But in a moment the President came back smiling and said: "I'm afraid I'll have to apologize for this horse. He is not a good soldier. At any rate, he certainly doesn't appreciate the courtesy of a salute."

That was his way of saying that he was sorry. He does things that way, mildly and gently, but beneath that cloak there is a will of steel.

As an instance of this, the President was discussing certain phases of the international situation with a high foreign government official one day, and the official was expressing disapproval of the President's policy rather pointedly. When it came to the point where he must say something in reply, the President simply said: "My dear sir, perhaps mine is not the most heroic course, but I think history will show it was the wisest."

It is the half-hour immediately after lunch that the President devotes to reading his tissue-paper copy of the day's news report. The rest of the day is arranged according to circumstances. But don't imagine that any of it is devoted to routine duties. If the President tried to do routine work around the White House for one month, he would be a physical and mental wreck. Take the mere signing of his name, for instance. If he personally signed his name to all the official documents which go out above his signature he wouldn't have time to do anything else, not even to eat and sleep. Stowed quietly away somewhere in the White House there is a certain middle-aged woman whose only job is to sign "Woodrow Wilson, Woodrow Wilson, Woodrow Wilson, Woodrow Wilson" to documents all day long.

Then take the reading of his mail. It would take about twenty-four Woodrow Wilsons working day, night, and Sundays to read and answer the letters, telegrams, and cablegrams that pour into the White House with his name on them every twenty-four hours.

Personally, he reads and answers an average of about fifty letters a day. He can do this because he writes, as a rule, very short letters, and, as another rule, he doesn't read long ones. The number of letters received by the President runs all the way from 200 to 6,000 a day.

The answer is of course that we American people address thousands of letters to the President which should have been addressed to some one or other of the government departments. If, among the letters the President must see, there are any long ones, they are turned over to expert summarizers, who pick out the essentials and attach the summary to the face of the letters. Thus a letter of eight or ten pages often is reduced to 150 words for the President.

On Tuesday and Friday afternoons in the winter he devotes an hour to an hour and a half to cabinet meetings, and another hour if necessary to conferences with individual members of the cabinet after the general meeting.

His other appointments average five minutes each. And here is a hint: If you ever have an appointment with President Wilson for 2:15 p. M., or any other stated hour, and you really want to see him, be there at the time stated.

Also, if you have been told that you will have five minutes with the President, don't expect to get six. The President believes that there isn't a proposition in the world which cannot be stated in five minutes. If he wants you to stay longer he will invite you to, but if he doesn't, and you happen to be in the middle of a sentence when the times expires, a certain heavy-voiced doorman will announce the next visitor, and you will be compelled to make a period right there in your sentence and say good day.

The President is compelled to do this. If he didn't, there would be no end to some visits. Mr. Wilson doesn't complain much, but it is clear to anyone who spends any time around the White House as a press man that he must constantly guard against being taken advantage of by pushing, prying, insistent individuals. Only once was he ever known to cry out against

How I Fell in Love with My Husband

OUR mother used to inform us that we need never worry about getting married; that when a woman set herself to get us we'd be got, though we might not figure that it happened just that way. Maybe she was right and maybe she wasn't, but, anyway, we're convinced that most women have a lot more to do with the preliminaries of matrimony than they ever let on.

That being the case, we think it would be interesting to know why, with such a bewildering variety of he-persons to choose from, you picked your particular husband. The men are responding in great shape with their stories of how they fell in love with you. So now let's hear what you have to say about them.

The three most interesting letters, of course, will take the $15, $10, and $5 we have for them. Don't use more than 500 words in the telling. We must have your letters before December 20th, addressed to the Contest Editor of FARM AND FIRESIDE, 381 Fourth Avenue, New York City. We cannot acknowledge or return unused letters. The awards and the letters will be printed in March.

these busybodies, and even then he did it in his characteristically pleasant way. It was at a Gridiron dinner one night, as the guest of the newspapermen of Washington in annual festival, that he said: "I have dreams sometimes in which I find myself entirely surrounded by prima donnas."

Just what he meant by that was very aptly illustrated the very next day by the performance of a certain man he had appointed to a high position in the Government. This man was a very able executive, but very blustery and blowy and self-important. He had received an invitation to a White House reception to be given to a group of dignitaries by President and Mrs. Wilson. The day after the invitations were issued this man called the White House on the phone and demanded an immediate audience with the President. Asked what it was he wanted to see him about, the man replied that he couldn't say, but it was very important. He was told that he could not be given an appointment unless he stated the object of his visit in order that the President might be informed. He raged and stormed at the other end of the wire and finally came charging over to the White House in person. And what do you think he wanted to see the President about? He wanted to complain that he had been mistreated in the seating arrangement for the reception. He wanted to let the President know that he considered himself about seven seats nearer the President in importance than the White House table plan suggested.

NOW I suppose you are saying to yourself: "Well, of course he cuts everybody else short, but what about Colonel House? He goes to the White House and spends days at a time."

If you think this quiet little man from New York, commonly known as "the President's personal friend and adviser," gets a chance to say anything he wants to and can take as long as he pleases about it, you are mistaken.

Colonel House spent four days at the White House once while I was making my headquarters in the press-room there for a news association. It was a typical visit and it ran about like this:

Colonel House, unannounced, arrived on the evening train, drove to the White House and, without seeing anybody, went directly to the room which is always held in readiness for him. The next morning he breakfasted in his room, and the President breakfasted in his. The President by that time knew that Colonel House was his guest. That day Colonel House did not see the President. That evening the colonel retired early and the President went to a vaudeville show. The next day Colonel House was busy with this and that. So was the President. And they did not see each other *that* day. On the afternoon of the third day Colonel House just happened to meet President Wilson in the corridor outside the latter's study, and this conversation ensued:

PRESIDENT WILSON—Hello, Colonel! I heard you were here. Sorry I haven't had a chance to see you.

COLONEL HOUSE—Hello, Governor! That's all right. I didn't want to see you about anything in particular, except this. ("This" consisting of about five brief sentences on a single subject.)

PRESIDENT WILSON—That's fine, Colonel. Glad to know it. Good-by.

COLONEL HOUSE—Good-by, Governor.

At midnight the following day Colonel House returned to New York without having seen the President again.

Of course there are times when they have longer visits, but it is just as apt to be the other way as not.

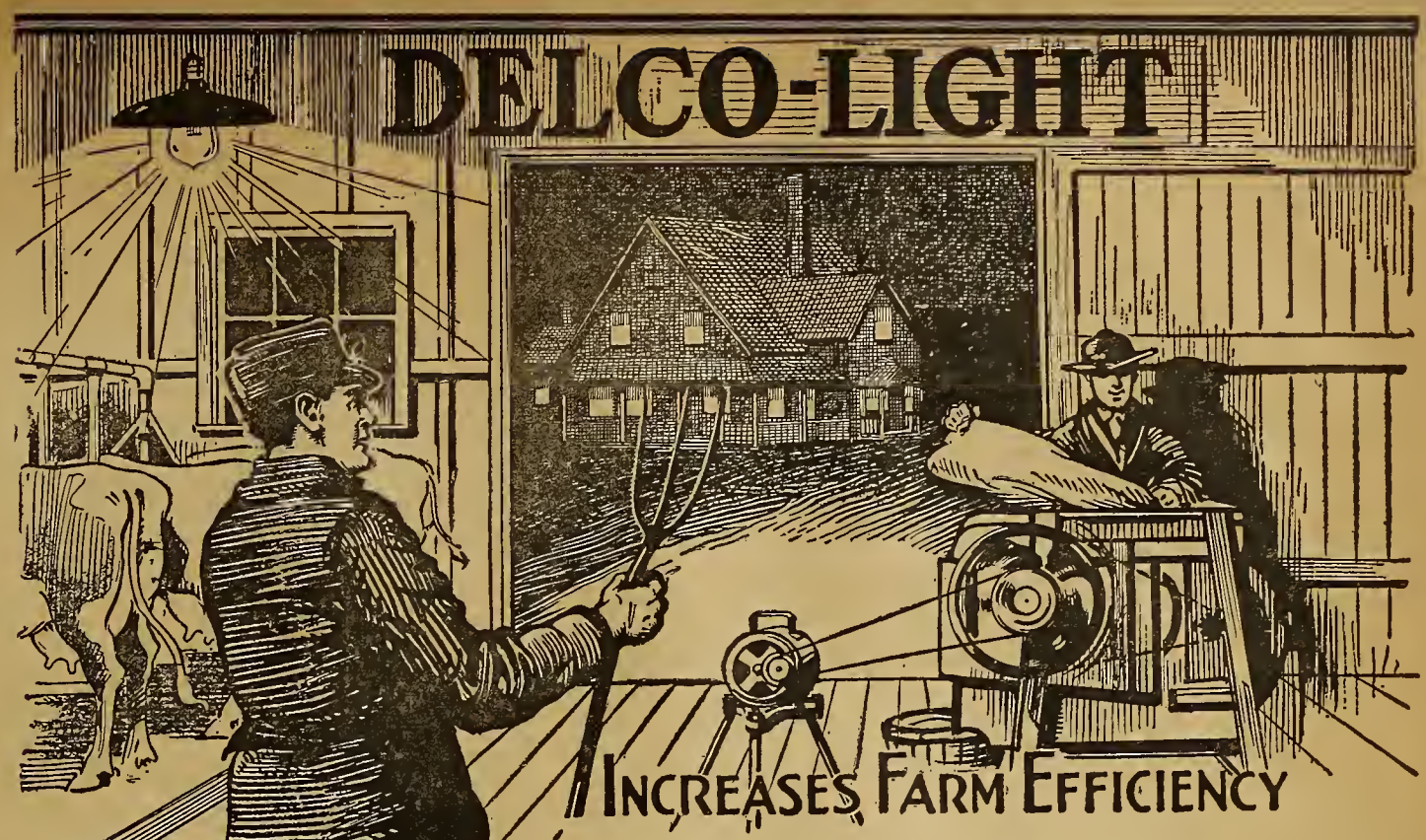
And perhaps you noticed that the President made no comment on what Colonel House told him. That is very characteristic of him. He is a wonderful listener. And when you have said that you have said it all. Time after time I have seen newspapermen accost officials just out from conference with the President, and invariably they have said: "The President had nothing to say."

He never does. From the most important cabinet meeting to the least important visit, the President utilizes the same formula, which is this: "Now, gentlemen, you are familiar with this subject. I know little or nothing about it. I am here to listen to what you have to say."

Throughout the audience, if it concerns a question he is still debating in his mind, he will say nothing, confining his remarks to an occasional nod or a smile. At its conclusion he will say: "Gentlemen, I am very grateful to you for the information you have given me. It is very interesting,

[CONTINUED ON PAGE 33]

DELCO-LIGHT



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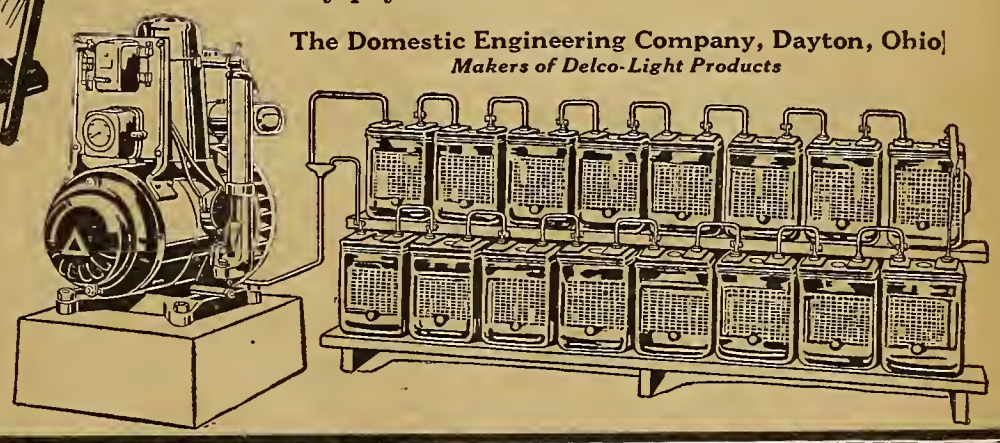

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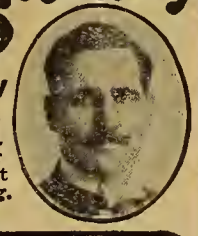

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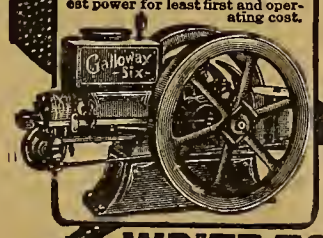

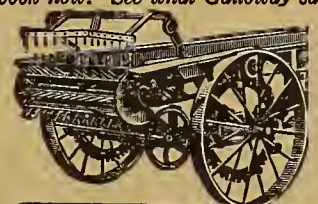

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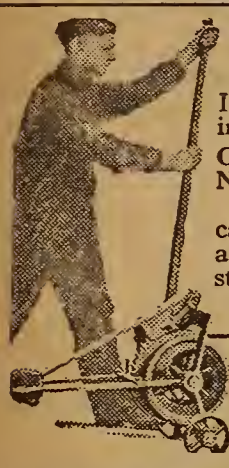

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Feeding $2 Corn

By T. J. Doles

FEEDING $2 corn, even when hog prices are around the $20 mark, was looked upon as a ticklish proposition by feeders who require twelve months and longer to raise hogs weighing 200 pounds or more; but it never bothered H. T. Marshall of LaSalle County, Illinois, when he weaned 59 Chester White pigs at the weight of 40 pounds. Mr. Marshall could have sold the pigs at $13 a hundred at the time, but the profit would hardly be noticeable.

Instead of marketing the pigs, he went out and bought corn at $1.97½ a bushel, and tankage at $80 a ton, and let the pigs have all they wanted to eat out of a self-feeder, and gave them the run of 20 acres of sweet-clover pasture. When he marketed the hogs on September 25th, averaging 171 pounds, and sold them at $19—15 cents below the top of the market—his profit was more than $300. He fed out more than 100 hogs on $2 corn, and still made money.

"These hogs were pure-breds, but not registered," said Mr. Marshall. "They were farrowed in April; and, while suckling, the sows had access to middlings, corn, and tankage in a creep. In the two months they ran with the dams I figure this feed cost about 10 cents a head, for it was stuff I had left over. It did a whole lot of good, however, for as soon as the pigs were

A boar with a strong, wide, well-arched back generally sires pigs with those attributes

weaned in June they went right on eating grain. In this way they kept on gaining.

"They weighed 40 pounds when weaned, and until marketing time made a gain of better than a pound a day. It required six months in all to make the hogs at 171 pounds. My corn cost me $932.20; tankage, $70.80; creep feed, $5.90; pasture, $100; and the pigs, figured at 13 cents when weaned, $306.80, making the entire cost $1,415.70. Return from the sale was $1,728.91, so that my profit was $313.20.

"The labor charges were small, so that I have the manure to cover marketing expenses. The clover on which I pastured these hogs—20 acres—also supported 5 cows and 116 other hogs, and still I had to cut it. I cut it once and left the hay on the ground, and still it went to seed. This field had an application of lime and phosphate.

Stock Water in Winter

By Wayne Cove

A CEMENT water tank built inside the barn will make the work of feeding stock in winter much easier. If the barn is reasonably warm the water will not freeze and the stock will drink more of it when it it is not ice-cold.

When the tank is out of doors, much time is wasted in chopping ice. Unless the stock drink immediately, the water soon freezes again.

Artificial warmers for tanks have been used with some success, but bringing the tank inside the barn eliminates the necessity of heating it.

The cement tank is satisfactory for inside purposes. It should be wider at the top than at the bottom, and the walls four inches in thickness. A drain pipe should be placed underneath the tank so it can be emptied frequently and cleaned.

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Book Free Mail Postal Today. Free book shows how the Minnetonna pays you $30 to $60 extra per cow every year. Shows what users say. Also tells how to get a Minnetonna free.

DAVIS-WATKINS DAIRYMEN'S MFG. CO.
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Your chance is in Canada. Rich lands and business opportunities offer you independence. Farm lands $11 to $30 an acre; irrigated lands $35 to $50. Twenty years to pay; $2,000 loan in improvements, or ready-made farms. Loan of livestock. Taxes average under twenty cents an acre; no taxes on improvements, personal property or livestock. Good markets, churches, schools, roads, telephones. Excellent climate—crops and livestock prove it. Special homeseekers' fare certificates. Write for free Booklets. Allan Cameron, General Superintendent Land Branch, Canadian Pacific Railway, 536 Ninth Avenue, Calgary, Alberta.

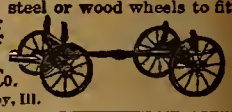
Lucrative Positions Open on Our Sales Staff

We are increasing our sales force and have a number of openings in various parts of the United States paying $35.00 to $50.00 weekly. No previous experience required.

One of these openings may be in *your* locality. If you are interested in a lucrative, pleasant, healthful occupation, it will at least do no harm to drop us a card inquiring about our proposition.

Country Salesmen Div., FARM AND FIRESIDE, Springfield, O.

Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.



Electric Wheel Co.
13 Elm St., Quincy, Ill.

ABSORBINE *STOPS LAMENESS*

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar trouble and gets horse going sound. It acts mildly but quickly and good results are lasting. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. $2.50 a bottle delivered.

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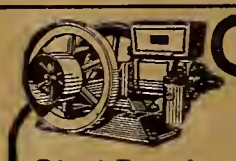

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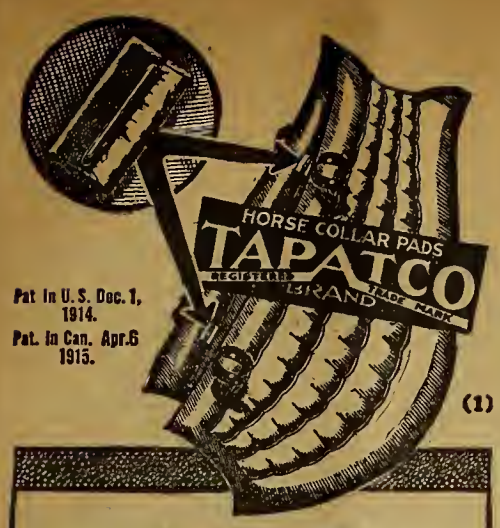
Start Easy in any weather. Pull steady. Carry big overload. All sizes and styles, 1½ H-P. to 22 H-P. 90 Days' Trial. Money Back Guarantee. Prompt shipment.

Low Prices Write for present money saving prices and Free Book, telling all you want to know about engines. Write today.

OTTAWA MFG. CO. 1153 King Street, OTTAWA, KANS.



Pat in U. S. Dec. 1, 1914.
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FOOD PRODUCTION MUST BE INCREASED

The horse is a vital factor in such accomplishment. His efficiency is measured by the degree of fitness for constant use.

Stuffed Collar Pads

Are the only guarantee against bruised, galled and chafed shoulders. They are better than other kinds, being soft, springy and absorbent. They make possible the continued use of a horse collar long after its worn condition would otherwise compel its discontinuance.

New Patented Hook Attachment

(Found only on pads made by us)

Consists of wire staple with felt washer. It gives hook a firmer hold and prevents pulling off, even though fabric is weakened by long usage. The greatest improvement since we invented the hook. Ask your dealer for Tapatco Booklet.

Thirty-Seven Years Making Pads
Look For the Felt Washer

SOLD BY DEALERS EVERYWHERE

The American Pad & Textile Co.,
Greenfield, Ohio
Canadian Branch: Chatham, Ontario

Only $2 DOWN ONE YEAR TO PAY

$38 Buys the New Butterfly Junior No. 2½. Light running, easy cleaning, close skimming, durable. **Guaranteed a lifetime** against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here.

30 DAYS' FREE TRIAL Earns its own cost and more by what it saves in cream. Postal brings Free catalog-folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

125,000 now in use

ALBAUGH-DOVER CO., 2139 Marshall Blvd., CHICAGO

Bog Spavin

Cure the lameness without scarring the horse.

Fleming's Spavin Liquid

$2 a Bottle—special remedy for all soft blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. Easy to use, only a little required and money back if it fails. Write for Fleming's **FREE VEST-POCKET VETERINARY ADVISER.**

FLEMING BROS., Chemists
258 Union Stock Yards, Chicago, Illinois

Send for Calf Facts

DON'T feed milk to calves. Feeding high-priced human food to calves is *waste*. Mature calves early, big and healthy on Blatchford's Calf Meal at ¼ the cost of milk. The other ¾ is *clear profit* to you. Write for the facts today.

Blatchford's CALF MEAL

Write Today Send your name and address for pamphlet "How to Raise the Finest Calves on Little or no Milk". No obligation, it's free—write today.

Blatchford Calf Meal Co.
Dept. 4039 Waukegan, Illinois

Does Your Stock Eat Up Your Profits?

[CONTINUED FROM PAGE 8]

of seeing the salesman, I talked to Graven for nearly an hour. He had just marketed a load of yearling steers which brought $14.75, and a load of hogs at a good price.

"The time has come when the live-stock producer must use his pencil and apper if he wants to make money in the producing business," said Graven. "Brains count too, as they go hand in hand with figures, to make up management. When I buy a bunch of cattle or hogs I take stock of my feeds, and if I haven't enough I figure out a few rations, see what is possible with them through short trials, and then buy the feeds which are the cheapest.

"We're coming to cheaper feeds in live-stock production. Cheap corn is no longer with us, and silage, straw, hay, and commercial feeds must be used extensively if we are to make money."

And Graven's wisdom is not shown alone in his feeding. His farming operations and cropping methods bear evidence of it. He has 20 acres of land in timothy this year. It will be plowed up for corn next spring, because, as he put it, "I can get only $200 worth of hay off the land, whereas I can get at least $1,000 worth of corn; and the land will not be any the worse for the change."

The steers which he marketed ate $660 worth of corn and $800 worth of gluten feed, figuring both feeds at market prices; so you can see that his rations save $2 corn. His profit on the steers, despite the fact they were not prime, was $400—$20 a head.

Talking about his hogs, he said: "When I bought the hogs I figured out their rations for different times in the feeding period. I took their weight into consideration at the time. Before I finished I had used up a tablet and a few hours' time, but I figured that by using commercial feeds I could save a lot of corn. The hogs made me $1,700, but I had only figured that I would make $1,400."

IF WE had more fellows like that in this business, who think and plan before they go ahead, we would have fewer failures.

Good feeders respond readily to good care and management, but good feeders are not always profitable. Take the trend of the market this year. Choice feeders are high, and so are feeds, with the result that cattle cost a whole lot when finished. On the other hand, cattle of medium quality and flesh can be bought much cheaper, and can be fed on silage, fodder, straw, and other comparatively cheap feeds.

"Grass is the cheapest thing I feed," said Ben F. Meyers of Dexter, Iowa, a feeder of forty years' experience. Mr. Meyers, one of the best judges of feeder cattle in the country, buys the kind he likes, but as cheap as he can get them. He has 200 acres of choice Iowa land worth $250 an acre. Yet he pastures 150 acres of this land, and makes beef that topped the market on two occasions this year. He is the man who said: "Never get so much into a steer that you cannot get it out."

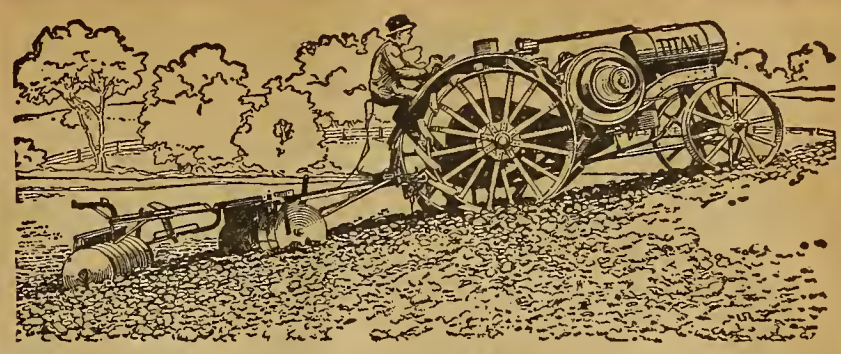
Only recently I talked over the necessity of management with John G. Imboden of Dectaur, Illinois, whose fame as a live-stock producer is nation-wide.

"Never judge a feeder by the class of cattle he feeds," said Mr. Imboden. "I feed good and bad cattle, having three bunches on my farm every year.

"Topping the market is a nice personal feeling, because it makes you believe that you are one of the best feeders; but not all market-toppers make money. I would rather make $10 a head on mediocre cattle than only $2 on prime cattle which topped the market.

"I use the self-feeder for my cattle," continued Mr. Imboden in talking of management, "as my place is small, and with a self-feeder I have a feeding bunk only 12 feet long. If I fed by hand, the cattle would eat at the same time, and I would have to have several hundred feet of bunks." An example of watching the details, that.

MOST farm mothers have secret rooms in their hearts where they discuss plans for their children with themselves. "If I Could Go Over the Road Again," in the January number, is one mother's story of an ambition to have her children anything but farmers. She realized it, and now she's not so glad as she thought she would be.



When You Buy a Tractor—

REMEMBER, it's the plows, disks, drills, binders, ensilage cutters, feed grinders, threshers and the like that do your farm work. The tractor is useful only as it furnishes cheap, dependable power for **all** the other machines.

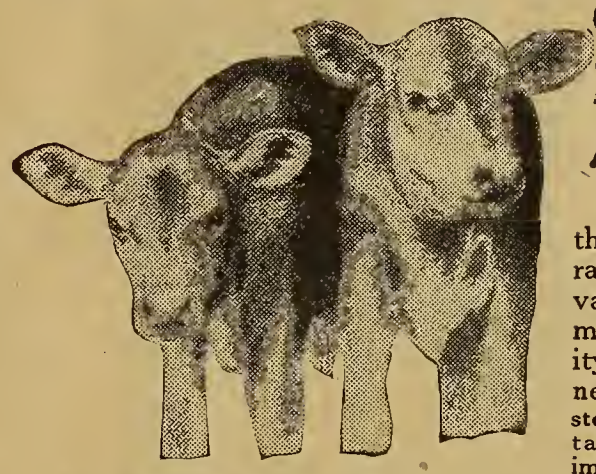
That's why we say, if you need a tractor, you can't make a mistake in buying an **International kerosene tractor.**

We have had over 75 years' experience with farm machines. We know the kind of power they require—all of them. For over twelve years we have sold tractors that supplied that kind of power. We know from experience that the sizes and styles of tractors we sell today will work with the machines you depend upon for your success and prosperity. And—our tractors all operate successfully on cheap kerosene.

When you buy an International kerosene tractor you buy with it the benefit of our long farm machine experience and all the advantages of dealing with a service organization which brings a well stocked branch house or a live, wide-awake retail dealer within telephone call of you. It may surprise you to know that an International tractor, plus these advantages, which no one else can give, costs you less per year of active service than any other tractor sold in anywhere near the same numbers.

International Harvester Company of America
(Incorporated)
CHICAGO U S A

SUCRENE



CALF MEAL Promotes Health And Rapid Growth

Scours causes most of the trouble and loss in calf raising. It is brought on by various causes: too rich mother's milk, varying quality of skim milk without the necessary additions to restore the fat which churning takes away—overfeeding, or improper feeding of any kind.

SUCRENE CALF MEAL

Prevents and Cures Scours

Albert Weisheimer, Clintonville, Ohio, writes of the loss of four calves by scours. The fifth, also severely afflicted, was cured in a few days when fed Sucrene Calf Meal and grew to profitable maturity. "This gave me greater confidence in the feeding qualities of your Sucrene Calf Meal."

A Scientifically Correct Calf-Raising Food

Contains special health and growth promoting materials not found in ordinary calf foods. Among these is blood flour, strong in animal protein and one of the best known bowel correctives; bone meal which builds up a large strong frame; soluble starch and malt flour, the most easily digestible sugar substance known to science; dried skim milk which supplies the mysterious life-giving force without which animals can not grow to full maturity. In addition we use corn feed meal, linseed meal and flour middlings.

Guaranteed 20% Protein, 4% Fat, 55% Carbohydrates, 3% Fiber

Save the cow's milk—Sucrene Calf Meal makes calf raising easy and profitable. It can be prepared in a few minutes and the calf enjoys it.

Order a 100-lb. sack from your dealer. If he does not handle it, write us his name and we will see that you are supplied. The coupon or a post card brings you free illustrated literature on care and feeding of farm animals.

American Milling Co., Dept. 32, Peoria, Ill.
Sucrene Feeds for all Farm Animals—18 Years the Standard

Get This FREE BOOK

Covers every phase of calf life from birth to weaning time. Tells about diseases of calves and how to prevent or cure them. Coupon or post card brings it to you.

Please send me illustrated literature on feeds checked below: (32)

[ ] SUCRENE DAIRY FEED
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[ ] SUCRENE HOG MEAL
[ ] SUCRENE POULTRY MASH
[ ] AMCO FAT MAKER FOR STEERS
[ ] AMCO DAIRY FEED (25 per cent protein)

My Dealer's Name .....
P. O. ..... *State* .....
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P. O. ..... *State* .....

There Are No Songs Like the Old Songs

Photographs from Charles L. Ritzman

THERE used to be something simple and responsive about the American public in the days before the fox-trot and the jazz band. People used to "render" songs in those days, and nobody was afraid of a little good, sloppy sentiment. Each one of these songs has done more for its writer than "Tannhauser" did for Wagner. Each one has built castles, and placed diamonds on shirt fronts, and cheered up Bethlehem Steel. For instance, take "The Curse of an Aching Heart." Thousands and thousands have wept as Emma Carus sang it. We heard you sing it once, Emma. We have never forgotten it. Nor have we forgotten that alabaster form of yours, Emma, and how we tried to figure out how you got into that gown:

"You made me think you cared for me,
And I believed in you;
You told me things you never meant,
And made me think them true.
I gambled in the game of love,
I played my heart and lost.
And now I'm a wreck upon life's sea,
Alone I pay the cost.

"You made me what I am to-day;
I hope you're satisfied.
You dragged and dragged me down until
My soul within me died;
You've shattered each and every dream;
You fooled me from the start.
And though you're not true, may God bless you—
That's the curse of an aching heart."

THIS song is remembered by about forty-nine million people in this country as "Those Wedding Bells Shall Not Ring Out," written by Monroe Rosenfeld and sung by Helene Mora. It is one of the two cases on record—the other appears also on this page—when somebody took advantage of the minister's rash invitation to interfere with the marriage service:

"A sexton stood one Sabbath eve
Within a belfry grand,
Awaiting signal from the church,
With bell rope in his hand,
As in the house of worship stood
A young and happy pair,
To pledge their troth forever more,
Each other's love to share.
The holy man then spake these words:
'Before you're joined for life,
Has any person aught to say
Against you as man and wife?'
Then down the aisle there came a man
With quick and eager tread,
And, pointing to the trembling bride,
These words he calmly said:

"'Those wedding bells must not ring out!
She is another's bride.
I saw her at the altar rail,
We stood there side by side.
She cannot claim another's hand,
She dare not break the law's command,
A guilty wife you see her stand.
Those bells shall not ring out!'
A shriek of woe—a glit'ring blade—
A lurch—a flash—a dart—
And, like the lightning's stroke, the blade
Had reach'd her trembling heart.
'You've kill'd his bride—oh, God!' they cried!
He swung the gleaming knife,
And pierc'd his own heart as he gasp'd,
'Nay, not his bride—*my wife!*'"

WE BELIEVE in being fair to both sides. Having printed that song about the guilty bride, we think it only just to include this one about the guilty groom. It is called "The Fatal Wedding." A mother with a baby in her arms happened into a church one day, and found her husband getting married to another lady:

"'If anyone knows reason why this couple should not wed,
Speak now or hold your peace forever,' soon the preacher said.
'I must object,' the woman cried, with voice so meek and mild;
'The bridegroom is my husband, sir, and this our little child.'
'What proof have you?' the preacher asked. 'My infant,' she replied.
She raised her babe, then knelt to pray, the little one had died.

"While wedding bells were ringing,
While the bride and groom were there,
Marching up the aisle together,
As the organ pealed an air;
Telling tales of fond affection,
Vowing nevermore to part,
Just another fatal wedding,
Just another broken heart."

When Al G. Field reached this point everybody was supposed to be in tears; but virtue found its reward in the next verse, when the husband died by his own hand before the break of day.

HERE is the song "that made all Broadway cry" when those tender balladists the Misses Darville rendered it. "Even the ticket speculators wept," we were told by the publisher. But as to the succinct question, "What more can a woman give?" we feel in duty bound to ask a little severely: "Have you your Liberty bond, ma'am? And how about those thrift stamps?"

"Do you remember, 'twas not so long ago, that on my hand
you placed a golden band?
Do you remember the kiss you did bestow as you called me
the first girl in the land?
Now you love me no more, our love dream is o'er.
I gave you the kiss of a girl so pure,
I gave you my trusting vow,
I gave you each treasure a girl could give,
But what is there left to me now?
I gave you the blessing of virtuous love,
That you could smile on and live.
I gave you my life to make me your wife—
What more can a woman give?"

CHARLES K. HARRIS, the gentleman registering carelessness with a cigarette, wrote this song, "While the Dance Goes On"—and sang it too. It is a strong indictment of the easy morals of the nineties:

"'You will not go to the hall, love,
Stay with our baby to-night,'
Rang in the ears of this lady,
Whose sparkling eyes shone so bright.
What cares she for home and baby,
While she is queen of the hall?
Husband at home, baby alone,
While the dance goes on.
Only too soon is it over,
Home she approaches at last.
There at the door she meets her husband,
Whose sad tears fall thick and fast;
Then not a word is there spoken,
Gently he leads his wife on,
There, on its bed, Baby lies dead,
While the dance goes on.

While the music is playing
In the grand hall room,
While all hearts beat softly
To the old sweet tune,
While the hours are passing,
Fleeting one by one,
No thought of the morrow,
While the dance goes on."

IT IS just our luck never to have been around when Marie Clements, "the greatest female baritone of any age," was singing "In the Baggage Coach Ahead," by Gussie L. Davis. It tells a touching tale:

"On a dark stormy night as a train rattled on, all the passengers had gone to bed,
Except one young man with a babe on his arm, who sat there with a bowed-down head.
The innocent one commenc'd crying just then as tho' its poor heart would break.
One angry man said, 'Make that child stop its noise, for you're keeping all of us awake.'
'Put it out,' said another, 'don't keep it in here; we've paid for our berths and want rest.'
But never a word said the man with the child, as he fondled it close to his breast.
'Where is its mother? Go take it to her,' this a lady then softly said.
'I wish that I could,' was the man's sad reply, 'but she's dead in the coach ahead.'"

MODERN imitations, somehow, don't seem to come up to the sentimental songs of an earlier vintage. Here's a "Baby's Prayer at Twilight," for example. Has anyone dropped a tear over it? The words were written by Sam Lewis and Joe Young and the music by M. K. Jerome. Belle Baker sang it:

"I've heard the prayers of mothers,
Some of them old and gray;
I've heard the prayers of others,
For those who went away;
Ofttimes a prayer will teach one
The meaning of good-bye;
I felt the pain of each one,
But this one made me cry.

"Just a baby's prayer at twilight, when lights are low;
Poor baby's eyes are filled with tears,
There's mother there at twilight who's proud to know,
Her precious little tot
Is dad's forget-me-not.
After saying 'Good-night, mama,' she climbs upstairs,
Quite unawares,
And says her prayers.
'Oh, kindly tell my daddy that he must take care!'
That's a baby's prayer at twilight
For her daddy 'over there'!"

THE "Cruel Hiss" is a tense, tragic story; but we must face the brutal truths of life. A popular young comedian got a fatal cable just before he went on for the last act. His friend Ned offered to go on in his place, but Jack was made of sterner stuff:

"The play began, tho' Jack refused his friend's kindness, and said,
'No, I'll go on and do my best, thanks for your offer, Ned.'
But those in front they quickly saw he wasn't in his lines,
For when he should have caused a laugh, a groan he got at times.
The last act on, we saw him start! We all expected this—
The first time in his bright career he ever got a hiss."

This song, written by Harry S. Miller, is said to have saved many an innocent young man from the pitfalls and dangers of a career on the stage.

Isn't it funny—

what a little spare cash will do for a fellow?
Makes him feel better—look better—work better.
Take a Cash-In Club member, for instance.
You can pick him out every time. He's speeding up and getting along—cashing in on his spare time.
There are hundreds of Cash-In Club members like this—making from $10 to $35 a week—over and above their regular salaries.
Come on, Folks! We can't waste time and coal and things these days—
Let's all join The Cash-In Club—and cash in.
If you haven't any spare time—
Oh, but you have!

Jim Pepper
Secretary

Have I?

Mr. JIM PEPPER, *Secretary*
THE CASH-IN CLUB
SPRINGFIELD, OHIO

Have I spare time? Can I cash in on it?

Name .....

St. Address .....

City ..... *State* .....

The Camera as a Salesman

By C. E. Bundy

I OFTEN wonder why so few farmers make use of photography as an effective means of advertising. Hardly any other business is so well adapted to photographic advertising as that of the farmer. He has the best of light, plenty of room, chance for choice of background, and his goods to be sold, such as stock, fruit, grain and vegetables, honey, maple sugar, or some or all of these articles, will make telling photographs and show the prospective customer just what he may expect.

For example, when a farmer advertises animals for breeding, in farm papers or county or city publications, he, as a rule, must write pages of description in answer to inquiries from prospective customers. When a limited number of miscellaneous animals or products are to be sold at intervals, farmers cannot well afford to get out descriptive catalogues. For that reason photography affords a practical and at the same time a comparatively inexpensive solution of their advertising problem.

Several good photographs of a bull, horse, cow, boar, ram, or cockerel, each showing the animal pictured in different positions, will give the interested customer an idea of what the animal or bird is like as an individual better than pages of written description. Also apples, potatoes, vegetables, corn, wheat, barley, etc., can be shown in a photograph after some practice so that those who are making inquiries can be satisfied as to the quality, and many additional sales will result from the photographs used for this purpose.

Photography is particularly strong as a sales maker in helping to show type, conformation, coloring, and vigor in pure-bred stock. Many a misunderstanding and trouble-making come-back would be avoided if good photographs of the stock had been used along with the sales-talk correspondence.

Getting this aid to making farm sales is a simple matter, too. There are excellent medium-sized cameras that will make attractive 4x5-inch photographs, or the postcard size—3¼x5½ inches—is more convenient to slip into letters. The "know how" of operating the camera can be learned in a lesson or two, so that a start can be made; then frequent practice, with occasional suggestions from an expert, will enable John and Mary or, lacking children, Father or Mother to become proficient in picture-taking.

There are various little technical things to learn that insure the most satisfactory pictures, but these will be picked up gradually, and the increased returns from a few sales made by the help of the camera will more than pay all the costs for camera and slides.

Another matter not to be lost sight of is the pleasure and interest added to farm life. One striking example that was strong in its appeal I saw not long ago in a farm home where a stock picture gallery showed a dozen generations or more of all the stock that had been raised on the farm, which was noted for its success with all kinds of stock.

This exhibit covered the entire sides of the room used as an office, with typewriter, desk, and business helps in general. Youngsters in the family take just pride in this exhibit. A number of the pictures show stock of their own raising which they photographed in various unique attitudes.

A GOOD deal has been written about farm records, but not much that was of practical value to the farmer. Most systems take too much time. A cost record as simple and time saving as A B C is outlined in the January issue by a farmer who has tried it.

Health Unbought

[CONTINUED FROM PAGE 9]

that was changed. I thought about it while dressing, and after breakfast I got out that book of verses and read those lines again—they were written by John Dryden, by the way—and I memorized them.

And now, somehow, they reminded me of something I had learned away back in my third year at school. It is something that every man living has learned at some time of his life, and it is one of the simplest truths ever taught. Maybe that's why so few people heed it. Just this: "The three cardinal principles of health are these—cleanliness, exercise, and fresh air."

On my way to the barn that morning I thought it all over carefully, and I realized that I had never obeyed those rules of health. True, I had always plenty of bodily exercise, but I hadn't regarded it as exercise, only as hard, disagreeable work. And though I was in the open air most of the day, my unventilated room at night had counteracted the good effect of this.

So, then and there, I mapped out a new program to be rigidly followed day and night. First, I would keep my bedroom windows open—or, better still, sleep on the porch—no matter if the thermometer went below zero. Next, I would take a cold bath every morning, and a hot one twice a week. And last, and most important of all, I determined to cut out drugs of every description.

Those were the rules I made, offhand, on that cold December morning, while I cleared the snow from the stable door and fed and watered the stock.

Later I limited myself to three pipes of tobacco a day; and to further mitigate this evil—if you want to call it such—I bought the mildest tobacco I could find, and kept my pipes reasonably free of nicotine.

EVEN more important than this, however, was the matter of diet. I grew fastidious about my food. I had been raised on greasy meat and pastry. Now I decided to get along without either pork or pie. It wasn't easy, let me tell you, to refuse to eat pie and sausage—but I did it.

I didn't eat anything, in fact, but plain, wholesome food, fruits and vegetables, whole wheat bread, and very little meat, except in the coldest weather, and I drank water by the gallon. Next to fresh air I consider water the most healthful thing there is—and the cheapest. A man can't drink too much of it, seems to me. A glassful in the morning, a glassful before each meal, several glasses between meals, and a glassful before going to bed—that was my portion, day in and day out.

I kept my elimination good and my mind off sickness and other gloomy thoughts, and I never tried to eat a meal in less than forty minutes. It was quite a while before I could break myself of bolting my food half-chewed, because I had been doing it all my life. The only way I could cultivate the habit of thorough mastication was to count ten or more for every mouthful. After a few days of that I ate slowly unconsciously.

It's wonderful, when you think of it, how a man can change the whole course of his life simply by changing his point of view. The hardest kind of work will be recreation if a man only *thinks* it's recreation. A merchant works harder in playing golf than he does in closing a business deal, but he doesn't think golf is work. The average farmer doesn't work as hard as the average football player, so why shouldn't a farmer tackle his job like a football player and make a game of it?

That's what I did. I began to look upon it as a healthful, profitable game, which not only was making money for me but was giving me something else ten thousand times more valuable—perfect health.

Instead of thinking of my farm work as drudgery, I thought of it as beneficial exercise, such as millionaires pay big money for. Instead of thinking of the cold, raw winds, I thought of the invigorating, pure country air, and I threw out my chest and breathed it in deep, and told myself it was the wine of life—and it certainly was! It fairly intoxicated me with health.

It is my honest opinion that a great many of the "sick" people in this country really have nothing the matter with them. They *think* they're sick; they *say* they're sick—and the result is they finally *feel* sick.

It wasn't easy at first to change my habits. If you've ever tried taking a cold bath in a cold room on a cold morning, maybe you know what I mean. And it

[CONTINUED ON PAGE 27]

Raise More Chicks

Every chick raised helps to win the war. You'll have larger hatches if your incubator has a *Tycos* Thermometer—it's guaranteed to be accurate, dependable and easy to read. If your dealer will not supply you, remit 90c. to us, and we will mail postpaid direct to you.

Taylor Instrument Companies

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X-RAY INCUBATORS

Have 20 Big Improvements

Wonderful exclusive features. Every one practical, important. Make poultry profits sure.

Write for New X-Ray Catalog No. 211. X-Ray Incubators and Brooders illustrated in colors. It is FREE.

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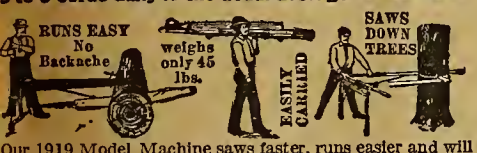

Our 1919 Model Machine saws faster, runs easier and will last longer than ever. Adjusted in a minute to suit a 12-year-old boy or strongest man. Ask for catalog No. M12 and low price. First order gets agency.

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We want to send you this big Poultry Book, absolutely FREE. Written by a former Government Poultry Expert; shows how famous Poultrymen use

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for winter eggs, bigger chicks and more profits. Don't fail to write for this valuable book today. Sent postpaid. A postcard will do.

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Hot-Water, Copper Tank, Double Walls Fibre Board, Self Regulated. With $6.35 Hot-Water 140-Chick Brooder, both only $15.95. Freight Prepaid E. of Rockies. Guaranteed. My Special Offers provide ways to make extra money. Order now or write today for my Free book, "Hatching Facts"—It tells all. Jim Rohan, Pres.

Belle City Incubator Co., Box 100, Racine, Wis.

Chickens Sick?—Use Germozone

Roup, colds, bowel troubles, sore head, limber neck, etc. At dealers or postpaid 75 cts. with 5-book Poultry Library. GEO. H. LEE CO., Dept. 450, OMAHA, NEB.

INDIAN RUNNER DUCK CULTURE

Finest illustrated duck book published. Tells how to hatch and care for greatest egg producing fowl on earth. How to get a start. Quotes low prices on stock and eggs of finest strains. Sent for 5 cents postage.

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POULTRY GUIDE Miller's American

—tells all about raising chickens, care, feeding, etc. Contains beautiful colored pictures of best paying varieties and best layers, sent absolutely FREE

Eggs and Poultry for hatching at special low prices.

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CLOVER and TIMOTHY $6.50 BU.

Greatest Grass Seed Value Known--Investigate. Alsike Clover and Timothy mixed--the finest grass grown for hay and pasture. Cheapest seeding you can make, grows everywhere. You will save 1-3 on your grass seed bill by writing for free sample, circular and big Co-operative Seed Guide, offering Field Seeds, all kinds. Write today

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POULTRY AND PIGEONS FOR PROFIT

Foy's big book tells all about it. Contains many colored plates—an encyclopedia of poultry information, poultry houses, feeding for eggs, etc. *Written by a man who knows.* Sent for 5 cents. Low prices, fowls and eggs.

FRANK FOY, Box 4, CLINTON, IOWA

MAKE YOUR HENS LAY MORE EGGS

TRADE MARK PEARL GRIT THROW PEARL TO POULTRY AND WATCH RESULTS

Every additional egg your hens lay increases your income. You can make them yield greater profit by giving them the grit that contains the vital substances needed in egg making—

PEARL GRIT

The Double Purpose Grit

Contains lime, carbohydrates, sulphur and silicon. Helps in the making of white, hard shells and meaty eggs. Invaluable both as a bone and flesh builder. Ask your dealer or send 10c for pound package postpaid. Booklet of poultry remedies free.

THE OHIO MARBLE CO. 106 Cleveland St. Piqua, Ohio

Trapping to Pick Winners

By S. H. Griffing

UNDER what condition does it pay to trap-nest? Here is the experience of my neighbor, William Hoover, as one answer to the question:

Four years ago Mr. Hoover began with 250 white Leghorn pullets procured from a prominznt breeder of Leghorns whose stock had made some good winnings at poultry shows, and were considered a good average as layers, for the breed. But Mr. Hoover started to find out just what his stock was capable of doing when given the best of care and attention, so he kept exact record of expenses and egg production, and at the end of the year was disappointed to find an average production of only 83 eggs per hen.

He then decided to begin trap-nesting, and installed trap nests at the beginning of his third year of operation. After trap-nesting his early well-matured pullets from October to midwinter, he mated the best of them to males that were the sons of hens known to have heavy-laying records. He kept 300 pullets from these matings, and the fourth year, 1915, he secured 44,920 eggs from them in eleven months, thus getting an average gain from stock descended from trap-nested breeders of 59 additional eggs per hen, or increased income sufficient almost to pay the entire feed bill of his laying flock for the year.

Each year since, Mr. Hoover has been able to make a small but encouraging addition to his average production, and this year his expectation is an average of 160 eggs from each of his 300 layers by simply giving good farm care.

From his experience thus far, Mr. Hoover believes that fall and winter trapping is sufficient to determine the heavy producers.

The type of trap-nest he uses is quite similar to the nests in use at the Storrs (Connecticut) Experiment Station, but he has added some adaptations of his own invention. Most trap nests are of solid construction, but the nests he makes are sectional, and all parts are interchangeable, each part being cut to a definite pattern. Mr. Hoover's nests are built in batteries of twenty-seven—nine nests in length and three high. One such battery he finds sufficient for 100 hens when they are given attention every two hours.

The space occupied by a battery of this size is 4 feet high and 9 feet 8½ inches long. At the present price of lumber such a battery of 27 nests complete can be made for not far from $10.

Mr. Hoover finds a great advantage in having these trap nests made in interchangeable sectionable form so that the batteries may be taken apart to move them, and for cleaning and disinfecting.

Squab Hardly a Luxury

By S. Thorne

SQUAB is no longer so much of a luxury nor so much more expensive to raise than other fancy-quality poultry used in first-class hotels and recreational resorts. Pigeons make the most rapid gain in weight of any edible bird, and they are still being raised in large numbers, since there are something like 50,000 persons engaged in squab raising in this country in a limited or a large way.

There has been quite a successful movement among squab breeders to substitute sorghum seed, including kafir and milo, also some weed seed, in place of wheat formerly so largely fed to pigeons. One labor-saving factor that appeals strongly to many poultry keepers is the fact that no direct feeding of the squabs is required. The old birds take entire care of the feeding, and prepare the food in their own craws in a semi-digested condition, then, with a pumping action, transfer it to the youngsters' throats.

For Your Boys—and Mine

[CONTINUED FROM PAGE 11]

and spoke directly to him for the first time:

"I appoint you a committee of one to interview that prosperous-looking old gentleman in the corner and see what he'll do for us."

"Not on your life!" answered the boy, ecstatic at being addressed by his divinity. "Do you know who that is?" He lowered his voice and leaned forward confidentially. "That's Henry B. Shaw of Cleveland—millionaire. Began at the bottom, you know, paper boy or something on the railroad, and ended president of one of the biggest lines in the country. Never stopped for anything but work till he was fifty-five. Then he retired, went to Paris, and fell in love with a dancer. Married her, by George! and brought her to Cleveland. But she said she couldn't stand the soft coal, and four years later ran back to her beloved Paris—with another man."

"Poor old thing!" said the fair-haired girl sympathetically.

"Well, that's not the worst," went on the boy. "She left the kids behind her. Two boys. H. B., Jr., the oldest, is the very apple of his father's eye. The younger boy was kind of sickly, and when he grew up he had a hankering to see his mother; so the old man let him go. Well, he crossed on the Lusitania, and went down. The old man was wild, and so was H. B., Jr., and with the idea of avenging his brother's death he enlisted as a private in a Canadian regiment. Been in the trenches all this time. They say the old man hasn't smiled since. No, siree! I don't want to tackle Henry B. Shaw!"

The dark-haired girl looked thoughtfully at the old man staring out into the storm.

"Let's not bother him," she said gently. "He looks troubled; but perhaps if we hold the auction in this car he'll get interested in spite of himself, and forget things. Now tell us," she turned to the commercial traveler, "how shall we begin?"

"Now, if I was to have *my* say," was the ready answer, "I'd rope in a few more helpers. There's a boy in khaki back in the day coach. I left him tryin' on a sweater for an old lady who's hurryin' to get it done. He's just said good-by to his girl, an's feelin' kind o' blue. It'll do him good to have somethin' to take up his mind. He an' I'll tackle the coaches, an' you young ones can go through the Pullmans. We'll meet here in half an hour an' compare notes. Now, get busy! If this engine should take it into its head to start goin' we'll be cheated out of a rummage sale."

It was an excited group that met some three quarters of an hour later. The boy in khaki was there; also the Boston banker and the woman doctor. It took the drummer at least three minutes to call them to order.

"Suppose we begin," he suggested, "an' each tell what we've got promised. In the first place, the old lady in the last day coach will give that sweater. She's workin' like mad to get it done. Then she's got some odds and ends she was carryin' to her daughter Lucy, an' a jar of strawberry preserve. She'll put them in. She's terrible enthusiastic. The two young girls sittin' in front of her have scared up a hatpin an' a tube o' toothpaste. An' I woke a brother salesman out of a sound sleep, and, instead o' swearin' at me, he gave me a couple o' sets of first-quality gents' underwear. That's all I got out o' that car; but the conductor took a pair o' garters right off his legs, so to speak, and the paper boy said he'd swipe three magazines an' a box of chocolate peppermints. I ain't got into the baggage car yet, but my hopes are high."

"Bravo!" exclaimed the Boston banker cordially. "I hereby pledge three pairs of new silk socks, two neckties, and three shirt studs, warranted to be eighteen-carat gold."

"I've gone through my suitcase," said the fair-haired Wellesley girl eagerly, "and all I could find was a pack of cards and a new crêpe waist; but a stout gentleman in the next car gave me a safety razor and six toothbrushes. He says he's very apt to leave them in hotels and boarding houses, so he buys them at wholesale. And the two little boys who seem to have nobody with them insisted on my taking their hairbrush and an illustrated edition of "Kidnapped." [CONTINUED ON PAGE 29]

Got 117 Eggs Instead of 3

Says One of Our Readers

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs," and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit maker, write E. J. Reefer, poultry expert, 4039 Reefer Bldg., Kansas City, Mo., for a $1 package of "More Eggs" Tonic. Or send $2.25 today and get three regular $1 packages on special fall discount for a season's supply. A million dollar bank guarantees if you are not absolutely satisfied your money will be returned on request and the "More Eggs" costs you nothing. Send $2.25 today or ask Mr. Reefer to send you **free** his poultry book that tells the experience of a man who has made a fortune out of poultry.

One of our customers says, "'More Eggs' increased my supply from 3 to 117 eggs."

Poultry Raisers Write From All Parts of U. S. Wonderful Results of "More Eggs"

Five Times As Many Eggs

Since using "More Eggs" do not think there is one chicken that is not laying. We get from 40 to 50 eggs per day. Before using "More Eggs" we were getting 8 and 9 eggs per day.

A. P. Woodard, St. Cloud, Fla.

"More Eggs" Paid the Pastor

I can't express in words how much I have been benefited by "More Eggs." I've paid my debts, clothed the children in new dresses, and that is not all—I paid my pastor his dues. I sold 42½ dozen eggs last week, set 4 dozen, ate some and had 1½ dozen left.

Mrs. Lena McBroon, Woodbury, Tenn.

160 Hens—125 Dozen Eggs

I have fed 2 boxes of "More Eggs" to my hens. I have 160 white Leghorns and from March 25 to April 15 I sold 125 dozen eggs.

Mrs. H. M. Patton, Waverly, Mo.

"More Than Doubled in Eggs"

I am very much pleased with your "More Eggs" Tonic. My hens have more than doubled up in their eggs.

L. D. Nichols, Mendon, Ill.

126 Eggs in 5 Days

I wouldn't try to raise chickens without "More Eggs," which means more money. I use it right along. I have 33 hens and in 5 days have gotten 10½ dozen eggs or 126.

Mrs. J. O. Oakes, Salina, Okla.

Never Saw Anything Like "More Eggs"

I gave the "More Eggs" tablets to my hens and in three weeks they began laying and laid all winter. I never saw anything like them in the world.

Mrs. Albert Smith, Penn. R. R. Ore Docks, Lackawanna, N. Y.

75 Per Cent Laid Every Day

The "More Eggs" I ordered from you last winter proved out very satisfactory. Fully 75 per cent of my hens laid every day.

H. C. Rader, Greenville, Tenn.

Doubles Egg Production

I have been using "More Eggs" Tonic 3 or 4 weeks now. My egg production has been doubled.

J. C. Koeninger, Paradise, Tex.

15 Hens—310 Eggs

I used "More Eggs" Tonic and in the month of January from 15 hens I got 310 eggs.

Mrs. C. R. Stoughton, Turners Falls, Mass.

Better Than We Say

I have used your remedies for two years and they are even better than you recommend.

Jennie M. James, Unionville, N. C.

Well Pleased with "More Eggs"

I received my "More Eggs" Tonic about the 8th of January and am so well pleased with it I am mailing you $1.00 for another box. I have about 150 hens and get anywhere from 80 to 100 eggs daily, and one day over 100.

Miss Vera Bowman, Rochelle, Va.

Write Today

You want to know about this wonderful egg producer. Don't delay but write today to E. J. Reefer, the poultry expert, 4039 Reefer Bldg., Kansas City, Mo. Send $1.00 now for a supply of "More Eggs," or take advantage of the special discount and send $2.25 for a full season's supply. Or send for Mr. Reefer's free poultry book. It tells the methods of a man who has made a fortune out of poultry. Don't put this off. Write today.

Dont Send a Penny

These Len-Mort Work and Outdoor Shoes are such wonderful value that we will gladly send them to you at once, no money down. You will find them so well-made and so stylish and such a big money saving bargain that you will surely keep them. No need to pay higher prices when you can buy direct from us. Why pay $5 and $6 for shoes not near so good?

Great Shoe Offer

This shoe is built to meet the demand of an outdoor city workers' shoe as well as for the modern farmer. Built on stylish lace Blucher last. Special tanning process makes the leather proof against the acid in milk, manure, soil, gasoline, etc. They outwear three ordinary pairs of shoes. Very flexible, soft and easy on the feet. Made by a special process which leaves all the "life" in the leather and gives it a wonderful wear-resisting quality. Double leather soles and heels. Dirt and water-proof tongue. Heavy chrome leather tops. Just slip them on and see if they are not the most comfortable, easiest, most wonderful shoes you ever wore. Pay only $3.85 for shoes on arrival. If, after careful examination you don't find them all you expect, send them back and we will return your money. Order by No. X15012.

SEND your name and address, and be sure to state size you want. You be the judge of quality, style and value. Keep them only if satisfactory in every way. Be sure to give size and width.

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American Mutual Seed Co., Dept. 142, Chicago, Illinois

CLOVER

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Buy now while we can save you money. Wonderful values in best seed. Guaranteed Pure Iowa Grown, recleaned and tested Buckhorn free. Also Timothy, Sweet Clover, Alfalfa, all farm seeds at wholesale prices saving big money. Write today. Don't buy until you get our reduced prices, samples and catalog.

A. A. BERRY SEED CO., Box 142, CLARINDA, IOWA

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We pay highest cash prices for all staple furs—Skunk, Mink, Muskrat, Raccoon, Red Fox. Fancy furs a specialty, including Silver and Cross Fox, Fisher, Marten, etc. Est. 1870. Our continued prompt returns and liberal policy are now bringing us shipments from all North America, Alaska to Mexico. Send for free Price List. Address

M. J. JEWETT & SONS, REDWOOD, N. Y. Dept. 7

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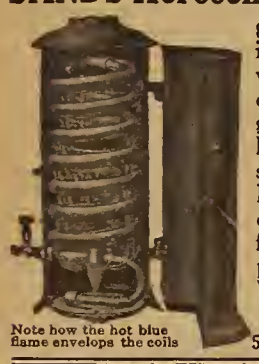

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gives you all the convenience of a continuous hot water supply in your country home. Heats 30 gallons of water in one hour—one gallon of kerosene burns for eight hours. No wick, no fuss, no dirt or dust—makes its own gas from kerosene. Safe, dependable and permanent. Write now for details.

The Augmore Mfg. Co.
5412 Sweeney Ave., Cleveland, Ohio

What I Did with One Nickel Capital

By Martha S. Ballentyne

MY OFFICE closes at six, and any evening at that hour, during the first week in February, 1918, I might have been seen hurrying along the road to where, on the site of a discontinued fertilizer plant, was the blackest, richest, most promising-looking earth imaginable. I would fill a 10-pound paper sack with this earth, and take it home with me, neatly tied up in an outside wrapping of heavy paper. No matter if people did think I was taking home my marketing that way.

When I had as much earth as I needed, I did not need to look for boxes: for some time I had been accumulating stout pasteboard cartons such as are used to enclose ink and mucilage for office supplies. These were about one foot square, and exactly suited my purpose.

At a seed store I bought for five cents a packet of early tomato seed. Perhaps it would not mean much to you—a five-cent paper of seed. To me it suggested a long vista of splendid possibilities.

There was a tiny square of back yard below my room window which I had the right to use if I desired. I filled the boxes with a mixture of yard dirt, dark with decayed leafage from a neighboring tree, and rich mold from the phosphate plant—not too much of the latter at first. The earth was sifted, pulverized, and packed; then I planted my seeds, two in each "hill," a quarter of an inch deep, and covered the boxes with some panes of broken glass I found cast aside, Thus, on sunny days, I had a little hothouse for my seeds. When it was stormy, cold, and dark, I tucked an old awning over them, like an extra coverlet.

IN DUE time they came up—250 splendid seedlings. I watered, sunned, and sheltered them. As soon as they were an inch high, I carefully drew one from each hill and planted it by itself.

I spaded up the bit of backyard almost two feet deep. It took me a long time to do it. Every chip, root, and bit of rubbish was carefully raked out. It was very small, so I had to sell my surplus plants. They were great, stocky, luxuriant green beauties. I sold them all—16 dozen, at 25 cents a dozen—to neighbors. The rest I planted for myself, except a few that I gave away.

I looked at them the last thing every morning before I went out to work, and the first thing when I came in at evening. At last they began to bear. I sold the first choice specimens, first at 10 cents apiece, and later at 5 cents, to the best restaurant in town. Later I used them myself for salad and sauce in soup, etc., and sold some to my neighbors at 20, 10 and 15 cents a dozen as the season advanced.

When my crop was at its height I began canning. I put up 50 quarts of tomatoes and 20 bottles of catsup.

October, threatening a light frost, found my bushes covered with green fruit. I gathered it and made up a quantity of preserves and chopped pickles.

Of course, there is no way of calculating the exact amount of pleasure I received from my work, nor the probable improvement in health and efficiency I gathered from getting "down on the farm" after a fashion. I know that in this way alone my profits were highly satisfactory. But as to the mere cash profit from my nickel investment—

Plants sold (16 dozen at 25 cents)	$4.00
Early tomatoes sold at fancy prices:	
Three dozen at 10 cents each	3.60
Five dozen at 5 cents each	3.00
What I used myself through the summer I could never have bought (at lowest market prices) for less than	6.00
50 quarts of tomatoes, worth 25 cents a can, less expense of canning and cans	10.00
20 bottles of catsup, worth 25 cents a bottle (I had the bottles on hand.)	5.00
10 pints of chopped pickles, worth 30 cents a pint, less cost of vinegar and spices (I used old pint jars.)	2.50
12 quarts of superior preserves, worth 75 cents a quart, less cost of 12 jars and tops, sugar and lemons, also heat for preserving ($2.00)	7.00
Net profit	$41.10

NOW that most farm women have the right to vote, what do they vote for? Farm and Fireside has found out, and it will tell you in January's issue. Believe us, there are some interesting things that farm women vote for.

How's this Gift?

—for Yourself or a Friend this Christmas

Two New Novels

Splendid long serials by favorite writers—right up to the minute—the sort the whole family will enjoy.

Ten Short Stories

All new and absolutely "different"! Love stories—adventure stories—war stories—business stories—stories of everyday, "you and me" folks.

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The latest, smartest fashions just when women want and need them most. They're practical, easy to make at home and always economical.

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Big, successful farmers will tell you how they did it. You can put their methods right to work, making big money for yourself. You know in advance their plans will "work" because they *have* worked.

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Searching, soul-stirring editorials that grip and hold your attention and really make you *think*. Human, friendly, understanding editorials—they always "hit home."

Expert Advice on—

Breeding and raising; crops from planting to marketing; poultry and pets; the big markets and factories; when to take a good profit; health and hygiene; automobiles and tractors; keeping accounts; war gardens—*everything* about growing things and the "money in them"!

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Easy! All you have to do is to tell your own personal experiences—things you know about—in your own way.

Household Helps for Everybody

A thousand and one things you can *use* to make your home work easy and pleasant—and many, many ways to save money.

Two full pages of "live" pictures—jokes and funny sayings—a score of good features besides in every single issue!

That's just a part of what you—and each of your friends to whom you send it—will get in a year of The New FARM AND FIRESIDE.

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Enter my own (new, renewal) subscription to Farm and Fireside for.....years.

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Five years $1.00—Two years 50 cents—One year 25 cents

What I Saw in a Paris Air Raid

[CONTINUED FROM PAGE 6]

furious attacks upon the wreckage were a menace both to themselves and to any living creature who might be buried there. The gendarmes were quick to see this. They ordered off the Australians and assigned the rescue work to the Red Cross men and French *pompiers*, members of the Paris fire brigade.

It was impossible to penetrate the dangerous pile of wreckage from the front, so two of the Red Cross men went through an adjoining house and entered the demolished building by way of the rear basement. Then they heard the calls of the imprisoned man, but between him and the rescue party stood a tottering tangle of beams and stonework. Overhead lay the wreckage of several floors, threatening to crash should a single timber or block shift position.

Two Paris firemen and as many Red Cross men crept over the wreckage as carefully as though they were crossing a depth of eggshells. To reach the man they had to squeeze through a narrow rent in the wall into a small room whose ceiling, badly cracked, still held place under support of that slender iron pillar. The passage through this wall was blocked by a stove.

The firemen demolished this barrier with hatchets, passing the broken pieces back, until an opening large enough for a single man to crawl through had been made. Through this crept the *pompiers* and the Red Cross men. Then they pulled the imprisoned man from the wreckage.

As the rescue party were passing out, overhead came a slipping, roaring crash. The party crouched and every breath was held. Pieces of plaster dropped from the ceiling and, with the report of a rifle, a great crack opened across the wall. Then silence.

A minute later the rigid rescue workers began to crawl out. Another minute and they were safe in the street and their charge was speeding to a hospital.

That night sixty Gothas raided Paris for three hours and dropped fourteen tons of bombs.

The raiders heard the rumbling of their bombs and saw the fires. But they did not see, as I did, the men, women, and children of Paris the morning after searching among the ruins for souvenirs—splinters of bombs and such things.

They did not see, as I did, the little woman whose coffee shop was blown in and well nigh gutted calmly raking among the débris and then making pathetic effort to repair the big copper percolator now crushed to junk.

They did not see the dry-eyed mother whose baby was crushed in the wreckage of its cradle shaking her fist at the north.

They did not see the people standing before the wreckage of their homes, shrugging their shoulders and saying, "*C'est la Guerre!*" ("It is the war!")

I went over to Rue François I, and called on M. Dolleans, the French censor. He lives way out in Montmartre, where a lot of things happened that night.

"Is your family safe?" I asked him.

"Most certainly, they are, my friend! And why not?"

"Oh," I said, trying to interpret his frown, "you know there was a stiff raid last night and—"

"There, there!" he said testily. "Why mention such a silly thing? Do you know, my friend, I do not permit my family to refer to such matters? And now, what can I do for you this morning?"

I saw a number of raids in Paris. Not once did I see terror among the people raided.

THIS is London, dim-lit, rumbling London, packed in streets with thundering motor busses, taxicabs, military cars.

Men and women look up to see the searchlights gashing the blue-black night in never-tiring arcs. There is no moon tonight. Ah, well, there will be no raid.

And so I reasoned that night as I turned over in bed and went to sleep.

Some time later I sat upright, listening. The sound was unmistakable—the same pulsing jar of guns you hear at the front or during the night raid. I went to my window, carefully pulled back the light-proof curtains, and looked out. No moon—just a star-lit night.

The firing became heavier; but not a siren. As I dressed I wondered how I could have slept through those sirens and

[CONTINUED ON PAGE 25]

How the packers have helped to develop good stockyards

—and how this has benefited you as a producer

WHOSE job is it to provide and maintain stockyards, or markets, for the open buying and selling of cattle?

Who shall see that these markets have good pens where your stock can be properly watered, fed and taken care of until sold?

Stockyards, in early days, were not efficiently managed, and were not financially attractive to investors, except in the largest markets.

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The present high efficiency of most of the principal stockyards is due largely to the time, the effort, and the money the packers have put into them.

All stockyards, including those in which packers are interested, are conducted as *public* market places for the benefit of all.

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Packer-ownership gives no special advantages to the packer and no control over live-stock prices.

These spot-cash markets have been a factor of very great importance in promoting the growth of the live-stock industry.

If stockyards efficiency can be increased by Government ownership and operation, all well and good. Swift & Company is content to stand on its record of having helped the live-stock industry by the part it has played in developing these market places.

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¶ You can overcome this without increasing your Christmas appropriation. A postal card mailed to the below address will bring you details of an extraordinary plan, whereby you can earn $5, $10, $25 or just as much as you like in your spare time, between now and Christmas.

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Chasing Fur Coats for a Livin

By A. R. Harding

I OFTEN wonder if milady ever stops to think about the day when her fur coat was running wild in the woods on the back of an animal, and about the man who trapped that coat, or fur, or muff, and how he went about it.

Take it all in all, the fur harvest of the United States is quite an enormous business. Thousands of men and boys in the wooded parts of the South, the West, the North, and the East make a business—and a paying business—of trapping animals of all kinds so that femininity may be properly and expensively furred.

Not considering the retail prices charged, but just estimating the actual worth of the raw skins, the annual catch of furs in this country is valued at pretty near $20,000,000. Of course the wearers of the finished fur coats and wraps pay many millions more than that for them.

Since the war began, there has been increased demand for furs of all kinds, and the value of the raw catch itself has jumped far above $20,000,000.

I have been in the trapping business myself for many years, and many facts have disclosed themselves to me which would rather surprise the average wearer of fur wraps.

The small boy on the farm—the busy, mysterious lad on your own place, or that bare-legged, freckle-faced, grinning youngster you passed at the side of the road the other day—is the one who rolls up the great bulk of small furs on which the fur dealers depend for their yearly supply.

These lads prowl around with their traps in all kinds of places and at all hours of the day and night, seeking out the little beasts which grow themselves for your benefit. They wander for hours through isolated gullies and up wooded ravines, beating the underbrush and filling creeks and small rivers with skillfully conceived pitfalls for these furred brethern.

Strangely enough—and ten chances to one you had no suspicion of this—it is a well-known fact among trappers that more than one fourth of the furs caught are taken unlawfully, by midnight raiding parties accompanied by dogs which dig out dens of the little beasts. Thousands of furs are obtained also by trapping out of season.

More than half of the $20,000,000 fur-crop proceeds goes into the pockets of professional and semi-professional trappers and boy fur scouts on farms in thickly settled sections of the country. You would not think that these men and youngsters get nearly $12,000,000 a year for this little side issue on the farms, would you? Yet they do.

Of course the commercial trappers of of our northern frontier and mountain regions took most of the highest priced pelts of rare foxes, lynx, marten, etc., but it was the active, persistent boy trappers working up and down the farm watercourses, rocky ravines, and the limited areas of timber land who rolled up the enormous aggregate of small skins on which the trade now depends for its fur supply.

Many of the smaller fur bearers thrive best where a food supply of grain and tender truck and forage crops supply an easy living or insure an abundance of insects and rodents on which they can s sist.

The catch of muskrats now heads t list in numbers, amounting to several m lion skins annually, and is increasing e of the Rockies. Close seconds are sku and opossum, followed by half a mill raccoon. Mink and fox—red and gray furnish another half-million about equ divided. Besides, there is a sprinkling beaver, coyote, bear, and wildcat in t wilder portions of the country. But of the less rare fur taken, skunk, muskr and mink make up fully 75 per cent of t value of the fur crop of the farming tricts.

That farm is rare where some keen-e boy has not located prospects for musk and skunk. Should several farmers wh land adjoins forbid hunting and trapp fur-bearing animals for even two or thr years, there would be a chance for a gantic furry harvest; but there wou meanwhile be loud complaint of crop d age from the rapidly multiplying fu pests. Their trapping serves the do purpose of decking out the women a girls, and preserving our crops from t furry ravagers.

Where it is legal to put out traps ea in November in the colder latitudes, catch of skunks and 'coons is sure to heavy, because they are then activ foraging for food before wintry weather gins, and the traps get them. Again, February, which is the mating season, th is a lot of skunk fur secured where trapp is allowed—the percentage of females ing greater than in November.

The No. 1 size steel trap has given the largest catches of skunk when fasten to a springy bush or branch. The s size trap with weak springs catches me most muskrats if baited with apple, tato, or parsnip under two or three inc of water wherever signs show the rats foraging. But unless the trap is staked that the catch will drown it is likely break loose.

The larger skins, like beaver, bad raccoon, and bear, are usually skin "open" like sheep, and then stretched, the smaller skins mentioned and others "cased," and fox and other valuable s are stretched. For the fox about four d are taken to cure the skin, but much pends upon weather conditions. T cleaner the skins are of fat and flesh, r moved immediately after stretching, t better returns can be expected when t sale is made.

From the time it is caught and cur until it finally appears for sale in the l uriously appointed department stores, a less pretentious establishments where common folk trade, the fur passes throu many interesting processes at the hands the manufacturer. That of course is w makes the great difference between t price the trapper gets and the price of t fur in the store.

But the big thing, the work that m be done before there can be any furs, to seek out the fur-bearers and snare the That, for the most part, is the work of boys on the farm. And it is a most pr itable work, too.

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What I Saw in a Paris Air Raid

[CONTINUED FROM PAGE 23]

up to the moment when the Hun was actually over London.

I went out and started for the lobby. Doorways were opening and closing all along the hall-way. Men and women—officers, civilians, their wives and daughters—hastily dressed, were making in the same direction as I. In the hallway of the second floor I passed between a double rank of maids standing with their backs to the walls. They were wrapped in blankets thrown over their nightdresses.

The lobby was filled, so were the tea-rooms, music-room, writing-room. Some were reading, others writing, some sipping tea, smoking and chatting. But there was a palpable tension. You could feel it.

"I didn't hear the sirens," I said to a British officer in military overcoat and pajamas.

"Oh, no; we don't use them any more, you know. Maroons give the warning—hear them?"

So they had not been guns that roused me—just the bursting of signal bombs high in the air to warn sleeping London that the Hun was over the Channel and would soon arrive. We were merely waiting for the storm to break.

The maroon ceased fire. Then a long, tense silence.

Suddenly—KRUMM!

You could feel the air beat against your eardrums. The windows rattled. That was the first gun or the first bomb, no telling which. The next moment hell was loosed.

The women clerks behind the desk grabbed their account books, stuffed them into the safe and turned the combination. Then they sat down, folded their hands in their laps and waited. The porters opened the doors to let in three men who had been caught in the street and followed those arrows on the blue-coated street lights which lead to air-raid shelters. Their coming was for all the world like people caught in a thunderstorm.

Then the porters locked the doors. An officer on leave promenaded with his wife clinging to his arm as she chatted and laughed. The letter writers continued to write, the tea drinkers stirred the saccharine tablets in their cups. Over in a corner a white-haired British officer slept in a deep leather chair.

Two "buttons" fell to "strafing" the "boundin' boches," because bells were ringing for shoes which had been left outside doors and were now down-stairs for their midnight polishing.

"An' now we 'ave to tyke 'em all up again an' bring 'em down again an' polish 'em an' tyke 'em back again! The blighters!"

I went over to the music-room to stand in the doorway while a wounded officer—a mere boy—sat at the piano and through the swelling thunder of the raid played Paderewski's Fourteenth Minuet. A Canadian Red Cross nurse joined me, and through the rest of the raid, while the officer sat at the piano, she discoursed upon the marvels of war-time surgery.

Next morning all London went about its work as usual. There were a few comments made on the fact that this was the first starlight raid ever made on the city, and that closed the case.

But the next night the vaudeville houses featured raids with rationing. I happened to be at the Coliseum.

"Another raid last night, Mrs. Spriggins," said the woman to the next in line in the meat-queue skit.

"Really?" replied Mrs. Spriggins over her shoulder as she began a mad search for her meat coupons. "Ah, 'ere they are! Now, you know, I'm rather 'ard of 'earin', Mrs. Lumsden, but I thought I did 'ear those syringes go off last night!"

"Syringes! You mean sirens, Mrs. Spriggins. But we don't use those any more, you know; now we 'ave the macaroons!"

Four years of night raids reduced the British to this frame of mind. As a psychologist the German is a splendid egoist, for he took the measure of his own spirit and with it endeavored to gauge that of the British and the French.

THERE'S another delightful double page of interesting pictures in the January issue. This time it deals with the youngsters a little older than "Brighter Babies." You'll laugh a lot over "Children of the Movies."

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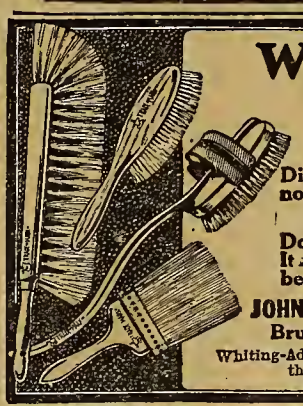

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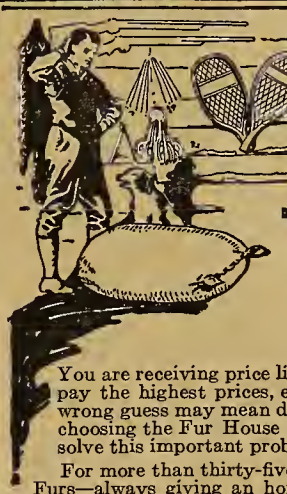

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A Two-Hundred-Acre Woman Patriot

This is the story of why Fannie Klinck keeps right on farming her 200 Iowa acres although she could well afford to retire if it were merely a question of money

By M. G. Franklin

HERE is a bit of real inspiration for people who aren't straining every nerve, muscle, and brain cell to help America end the war. It is from the woman farmer this article is about. She writes:

"People say, 'You are so foolish to work so hard when you have plenty of property.' But I know in my heart that it is everyone's duty to act the part of a soldier, and that having the ability to do the work of three men on the farm it is my place to do it. That is why I am farming 200 acres all alone, working in the fields every minute of daylight, and doing the chores by lantern light."

THE EDITOR.

Fannie Klinck set about to win the war growing food, just as though there were nobody else to help

THERE are many remarkable things about Fannie Klinck, most of which become evident to even the most casual visitor at her personally operated farm of 200 acres near Clarksville, Iowa.

But one thing stands boldly out above all the rest. That is the general-like manner in which she marched the war out to her place and set about winning it, just as though there were nobody else to help. In every sense of the word, she is a real farmer.

Fannie Klinck doesn't have to farm for a living. There was a time when she did, but she did it to such good effect in years gone by that so far as cash and property and crops are concerned she needn't turn a finger again as long as she lives.

But when your country goes to war, and takes the cream of the farmhands for fighters, and then calmly announces to you that in spite of this deprivation you will have to produce more from your farm than you ever produced before, even after the fighting is ended—why, then there is nothing for a conscientious American citizen to do but dig in and produce. And Fannie Klinck did.

Her Products Take Prizes Too

THAT isn't all: Mrs. Klinck does her own housework; and between times she finds a few hours to run the multitudinous affairs of the National Congress of Farm Women, of which she is president. After those little trifles are disposed of she takes a little recreation by training a corps of Camp Fire Girls in outdoor life. Once a week, also, a class of neighboring farm girls comes to her house for French lessons; and there isn't a day in the week but that some lad or lass, or maybe several of them, stops in for advice and counsel of all sorts from this somewhat busy woman.

All in all, it is my personal opinion that Mrs. Klinck, who was born in a log cabin on the 200-acre farm she now owns and operates herself, richly deserves the title of "the most self-reliant woman in the world," which was once conferred on her by an agricultural expert.

She went at farming at the very beginning with the same vim and spirit with which she attacked the job of winning the war by farming. And how does she stand in the farming world? What practical results has she obtained? Well, read this:

Mrs. Klinck was the first woman in the United States to win the grand champion sweepstakes for the best individual farm exhibit at any state fair. That was in 1914, at the Iowa State Fair. But just to show that this was no accident and that she could do it again, Mrs. Klinck won a similar honor at the International Soil Products Exposition held at Peoria in October, 1917.

It would be hard to find a woman, whether of the farm or of the city, with more downright grit, more self-reliance, more ability in the work chosen for her life career. Mrs. Klinck makes work her religion; she believes she is doing every bit as much in the harvest fields as though she were knitting sweaters or even nursing the wounded and the sick in a base hospital of France.

"Last spring, after a long and strenuous winter," said she, "I felt tempted to buy a nice little home in town and rent the farm, so I could have a rest, with nothing to do but my housework and knit socks and sweaters for the Red Cross. Yet I knew in my heart that it was everyone's duty to act the part of a soldier and that having the ability to do the work of two or three men on the farm it was my place to do it.

"Some people say, 'You are so foolish to work so hard when you have plenty of property to keep you without working.' I am doing what seems best as God has given me eyes to see it. That is why I am farming 200 acres all alone, working in the fields every minute of daylight, doing the chores by lantern light. I have hired no help at all this year, although I would have done so had I been able to get competent help."

It is now almost ten years since Mrs. Klinck decided that, while all farming is useful, there was no excuse for her not becoming one of the best of farmers. She could see no earthly reason why a woman should not be just as good and efficient a farmer as any man, why she should not be the best of all women farmers.

To find out if this were possible, she set about to compete with other farmers—men, all of them—for the honor of having the best individual farm exhibit at the state fair. For four years she exhibited, bringing her oats and corn, her wheat and alfalfa, her grains and grasses, her fruits and vegetables, scores upon scores of specimens of her farming efforts, tastily arranged in a booth to show the versatility of her endeavors and the productiveness of her land. The first year her exhibit, raised and arranged entirely by her own hands, was awarded fourth place. She went back home determined to beat that record or die in the attempt. The following August found her exhibit standing second.

"I guess I was going a little too fast," she admits now. "I learned that pride goeth before a fall, for the next year I slipped back to third place. Then I made up my mind that I would win the grand championship sweepstakes the next year or know the reason why. So, having said I'd do it, why, of course, I did."

In every sense of the word, this woman is a war farmer

Perhaps the greatest secret of Mrs. Klinck's success has been that she has tested and retested seeds and used experimental plots and gardens far beyond the efforts of almost any other farmer. She is a "pure seed" and a "trial plot" evangelist.

"I plant every kind of seed obtainable in my experimental gardens, so I may study each as it grows, and come to know it as I would an old friend," explains Mrs. Klinck. "Then, too, I cross different varieties to develop new kinds. The interest in the queer hybrids makes the hoeing less tiresome.

"The small garden grains are planted in rows, and then crossed with strips of manure, lime, and commercial fertilizer, so the effect on each kind of grain can be easily ascertained. The best specimens are saved for exhibits and seed for succeeding years. The surplus is donated to schools to start their school gardens. Visiting these gardens is one of my greatest pleasures.

"The regular field crops are also made to serve as experiments; different varieties of corn are planted and the development of each carefully watched. Yields in corn and small grains have been more than doubled through finding varieties that were particularly suited to our soil and climate. Seed selection and development have made a still greater yield possible. Grains are treated for smut. Potatoes are soaked in a formalin solution for scab, sprayed with the Bordeaux mixture for blight, and the seed planted in wholes, halves, and quarters. The interest created by doing things in different ways makes life well worth while.

It is this spirit of trying new things, and doing the old things better than anyone else has ever done them, which has won the prizes for Mrs. Klinck at Des Moines, Peoria, and other places, and which has made her one of the foremost farm women of the world. She is intensely practical. That is evidenced in her plans for the next meeting of the National Congress of Farm Women, to be held at Jacksonville, Florida, December 3d to 6th, in connection with the Farmers' Congress.

Her Plans for Farm Women

"I HAVE many plans for the National Congress of Farm Women," she says. "I am working to have all the farm women's clubs represented by delegates, and thereby reach the real farm women—those who are earning their living and paying for their farms, rather than the retired farm women who don't need help.

"The present system is the appointment of delegates by the governors of the States, and it often happens that they do not know the real farm women and send city women or neglect to appoint anyone to represent their State. Then, too, the appointment of delegates in this way is apt to have a political significance which should be avoided.

"Next year we are planning to publish a bulletin each month, giving the reports of the farm women's clubs in different States. One feature, for which we have great hopes, is the development of the Farm Women's Exchange, similar to the farmers' exchange in Missouri. There is much to be done, as the Government is spending great sums in extension work which is only a waste. The real farm woman has no time to crack nuts to make the cottage cheese look like sausage and veal loaf and such things. She is more in need of a market for her surplus garden stuff and better prices."

If Fannie Klinck has any hobbies they are to be found in her garden of wildflowers and her garden of girls.

"In the summer, when I can possibly get away," she says, "I go to a girls' camp on the lake, where my work is to tell stories of animals, plants, birds, and insects. I am guardian of the Cliowa Camp Fire Girls; they call me the Nature Interpreter. I give them one afternoon each week for the teaching of French. I try to do whatever I can to broaden their vision of life, to make them better girls and women in every way.

"I have called handicraft my religion, for when I can teach a girl to make beautiful lace from a five-cent spool of thread, to embroider pretty dresses, to make her hats and trim them with ribbon roses, I feel that I have, perhaps, helped to [CONTINUED ON PAGE 30]

Gray Socks for Red

By Emily Rose Burt

THIS is a Christmas when we can hardly bear to think of getting presents—we feel as if we wanted the boys in the service or the suffering people in the war countries to have whatever would be coming to us in the way of gifts.

This feeling can be expressed wonderfully well by a big group of people, such, for instance, as a whole Sunday school.

Sometimes there's the Sunday-school tree with many gay red socks full of candy for the children. This year instead of getting candy in the gay red socks, maybe some Sunday school will like giving to fill sober gray socks.

That doesn't mean necessarily giving up all the Christmas fun. Here's a plan: Hand out, perhaps a month before Christmas, to each Sunday-school class a big gray outing flannel sock, and then announce that each class may fill this soldier's sock for Christmas Eve.

Every member of the class will feel a certain responsibility about giving money or articles suitable for a soldier or sailor. Of course the teachers will guide the giving into the right channels, and the gifts will go to the boys in the camps on this side who have gone from that particular church and Sunday school.

On Christmas Eve the classes may have charge of their respectively filled socks, and the assembling of them may be made into the entertainment of the evening.

Each class should plan to give some "stunt" in connection with turning in its sock, and the series of stunts will form a real pageant on a small scale.

First, with a toot of trumpet, a class of little boys may enter dressed as old English yoemen, dragging their filled sock on a sled as if it were a Yule log. Holly may be heaped on top of the sock, and the boys may wear wreaths of holly around their necks. In the center of the stage they pause with their "log" and recite or sing an explanatory verse.

FOLLOWING them may come a troop of little costumed figures (another class) representing different articles in the sock:

CHOCOLATE BAR enters dressed in dark brown—straight panels hanging down back and front, a pointed cap on his head.

SHOESTRINGS is completely hung over with narrow khaki-colored twine streamers, and carries a soldier's shoe in each hand.

STAMPS wears a dress completely pasted over with old postage stamps.

TOOTHPASTE may be represented by means of a tubular cardboard costume in the color of some well-known kind.

HANDKERCHIEFS is indicated by a costume consisting of several squares of khaki-colored cloth graduated in size, with holes cut in the center to be slipped over the head.

If the costumes do not seem self-evident, labeling placards may be worn as well.

A third class may represent a procession of things which the members have gone without in order to fill the socks. CANDY, MOVIES, PEANUTS, GUM, and SUGAR may pass across the stage, the leader bearing the sock. There need be no great expense in getting up these costumes. Materials already at hand may be utilized in many cases.

Still another class may display the parts of a comfort kit—thread, buttons, needles, and so on, the next to the last child carrying the kit and the last one the sock. At the end of their stunt they place the kit in the sock.

Another class comes in with arms full of books and magazines, and recites in concert a rhyme for the occasion.

Santa Claus, with the mammoth sock instead of his usual sack over his shoulder, comes trudging up in the rear.

Each class as it finishes its part hangs its sock on a peg provided at the back of the platform, so that a row of bulging big gray socks remains as the result of the evening's pageant.

As an additional feature, perhaps visiting soldiers or sailors could be requisitioned to give a final scene.

Someone has previously hung a large sign over the row of socks saying: THESE CHRISTMAS SOCKS ARE FOR OUR SOLDIERS AND SAILORS, FROM THE —— SUNDAY SCHOOL.

A group of men then comes upon the stage, discovers the socks, and with whoops of delight begins to explore.

A good way to end the program is to strike up the "Star-Spangled Banner," with the men in blue and khaki still holding the center of the stage.

NOTE: Material for the Christmas Sock program will gladly be sent on receipt of a stamped self-addressed envelope, by the Entertainment Editor, FARM AND FIRESIDE, 381 Fourth Avenue, New York City.

High Patriotism vs. Low Necks

By W. L. Nelson

THE girl who persists in wearing thin waists with extremely low necks, very short skirts, silk hose and low shoes, and a minimum of underwear, even in cold weather, is running a good chance of wrecking her health. She may fall victim to lung trouble or one of those myriad ills that womankind is heir to.

With the tying in of our prosperous farms to the cities, with the strong threads of motor and interurban lines, this extreme, ultra-fashionable dress mania has laid its fascinating hand on the farm woman.

But what has this to do with patriotism?

Much. With the world's man and woman power drained by the war, it is a distinctly patriotic duty for all of us to maintain at maximum our health, strength, and energy. Every farmer knows that stock left exposed to storm and cold requires more food to generate more heat units to keep it warm. The human body with insufficient underwear, and with neck, arms, and legs exposed, wastes energy and makes itself liable to illness.

We dare say the saving of food, if women clothed themselves properly, would not be inconsiderable; but, even with that aside, ultra-fashionable dressing is a costly and unpatriotic fallacy.

With the war over we are going to have enough maimed men and men broken in health, because of exposure and hardships, to look after without caring for women who are the victims of tuberculosis or other diseases brought on by exposure. Nobody would have our women unmindful of personal appearances, or have them ignore fashion so long as it is safe and sensible, but all thinking people agree that many present-day fads are not only foolish but dangerous.

Fortunately, the women of the farm have been generally free from extremes in dress. These tendencies toward it should be checked, lest they assume dangerous proportions. Sanity has always been associated with the soil, and the country has likewise consistently nurtured patriotism. National needs demand that these conditions be continued.

Health Unbought

[CONTINUED FROM PAGE 20]

wasn't much easier sleeping outdoors, with the mercury hitting zero. But I did it. I moved my bed out on the back porch and slept there all winter, and I took my cold plunge every blessed morning. And I'm a better man for having done it.

I don't mean to imply that what I did is exactly the thing for every other man who feels badly to do. I give you the details of my experiences becaue it is the only experience I am competent to talk about in detail. The things you must do to put yourself in tiptop shape again depend entirely on your own circumstances and your own condition. The man who is really sick ought to be in the hands of a competent surgical or medical practitioner, but the man who is only living wrong can do wonders for himself. There is a rational system for his particular case, which, if followed, will bring him around in great shape; and it is for him to study it out and put it into practice for himself.

WHAT is pneumonia, anyhow? How do farmers, who are so far away from congested centers where it flourishes, happen to get it? How can it be avoided, and what should be done with a member of the family who shows symptoms of it? And what are the symptoms? Dr. John B. Huber of the Life Extension Institute answers all these questions in the January issue. He knows the right answers, too.

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Another moment and in come Elman, Jascha Heifetz, Kreisler, Paderewski, Powell, Zimbalist, and other famous instrumentalists to play for you. Then there follow the Boston Symphony Orchestra, Philadelphia Orchestra, Sousa's Band, Pryor's Band, Conway's Band, Victor Herbert's Orchestra, and other celebrated musical organizations to entertain you. And you have, too, Harry Lauder, Marion Harris, Raymond Hitchcock, and other comedy "headliners" to cheer you with their merry music and wit.

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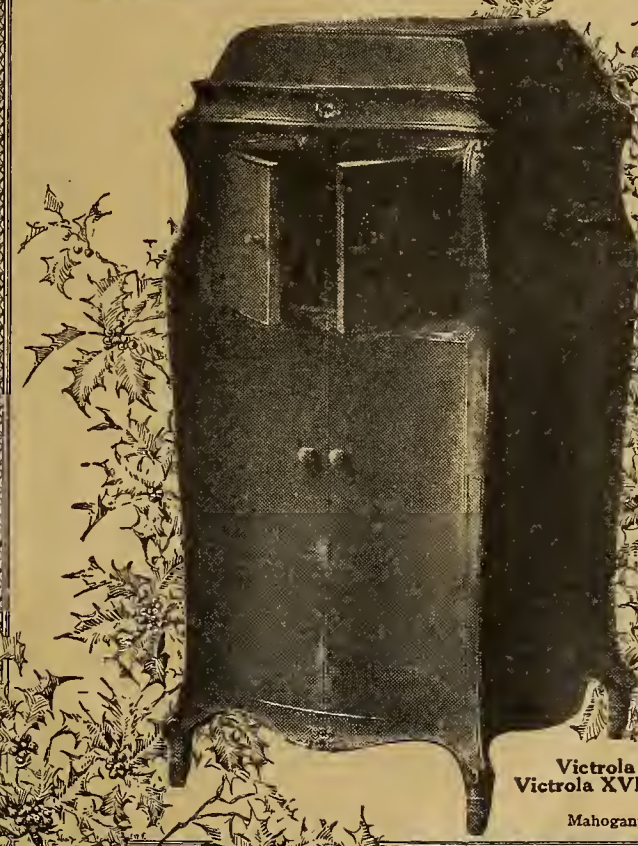

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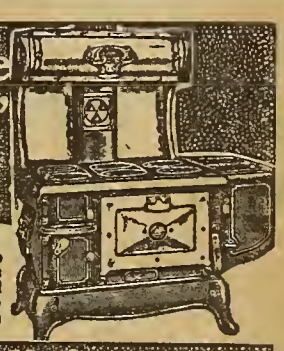

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Keeping Your Baby Rosy-Cheeked

By Helen Johnson Keyes

I AM always surprised to see how many country babies are brought up in the house. With porches and yards and acres of shady fielbs at hand, the infant is tucked into a hot room most of the day. Why not let him sleep in his carriage on the porch or under a tree? He should be there all day, brought in only for his nursings, and then laid down to sleep again outdoors.

In the summer he should be protected against the sun by the hood on his carriage or by a screen or parasol; and in winter he must be wrapped in blankets to keep his body warm, but never perspiring. Whatever the weather, his face and eyes must be screened from the sun. He should lie with his back to it.

Sleeping out of doors is a splendid thing, no less in winter than in summer. Even with the thermometer at zero I have wrapped my babies in numberless shawls and placed them to sleep in a windless corner of the porch. How sound and health giving are such naps, how bright the cheeks grow, how sturdy the frame! Be sure that the body is aglow with warmth, and if it is do not fear the cöldness of the air.

It would not be well, however, to subject a baby under three months old to long periods in a temperature lower than freezing. In tender spring and summer weather an infant may begin to live outdoors when he is two weeks old, beginning with an hour twice a day in the brightest hours, and working up quickly to all day. A baby born in late autumn or winter in a cold climate had better wait until he is a month old, and until a mild day dawns, before taking a full draft of outdoors.

In the meantime, however, he should be all day and all night in a well-ventilated room, protected against drafts, but with a window slightly open. Let your baby have all the air and space for himself. Don't keep him in the room with you. Let him sleep, sleep, sleep, waking him only at the regular hours for feeding. Keep him dry, and when he seems restless turn him from his back to either side. The right side is preferable directly after eating.

Never take your baby to sleep in bed with you. This is very unwholesome. He should have for a bed his roomy clothes basket, with a pad on the bottom, well protected by a rubber sheet covered with a folded cloth. There must be no pillow. This basket should be placed safe from drafts. Preferably, it should be in a room by itself, but near enough to you, of course, for you to be aware of disturbances. This room should have been bathed and purified by the sun through the day, and it will be drier and more healthful if it is on the second floor.

How to Give His Daily Bath

Perhaps you are asking if nothing is necessary to an infant except correct feeding and sleep in fresh air. Yes; one more thing is very necessary, and that is cleanliness. His body must be clean from scalp to toe, and everything which he touches and everything which touches him must be clean.

He should have a bath every morning before his nine o'clock feeding. The temperature of the room should be about 72 degrees, and that of the water between 95 and 98 degrees, until he is six months old, when it may be reduced to 90 degrees. A bath thermometer can be bought for a quarter, and is a worth-while purchase.

The bath may be given in the regular bathtub, if you have one, otherwise a tin or enamel tub can be set upon a table and used conveniently. A wood tub should be avoided, as it absorbs the dirty water from day to day.

In order to save the baby from exposure, be sure that you gather together where you can reach them all the things that are required for the bath and the dressing which follows. There must be a warm blanket in which to wrap the wet body when you take it from the tub, two soft towels, a wash cloth, a cake of castile soap, and some talcum powder, or powdered starch or rice. Also, you will need a glassful of warm water in which has been dissolved half a teaspoonful of borax, a small wad of absorbent cotton, and a smooth stick, one or two inches long—a match with the head taken off will do.

On another table or chair lay out the clothes which baby is to put on. It is a good plan to keep two sets of these going, so that the clothes which are removed in the morning may be thoroughly aired, if they do not need to be washed, and then laid away for the following day.

If the umbilical cord is still dressed, the water must be so shallow as not to wet it; otherwise it may cover his body. The stump of the cord should drop off on the fourth or fifth day, but occasionally something goes wrong and healing is delayed. Hold your left hand under his head like a pillow and with your right hand bathe him with a soft, soaped cloth, not forgetting his scalp. But be very gentle in touching the top of his head, for you know the bones have not closed and there is only a thin covering over his brain.

Lay the blanket in your lap and wrap the wet baby in it, patting him dry with a soft towel. The creases should be dusted with powdêr in order to keep the delicate skin from chafing.

Is He Gaining Every Week?

After he has on his shirt and diaper, weigh him, if you have scales. It is worth while to afford these if you can possibly do so, for a baby's weight is the surest indication whether or not his food is nourishing him. It is impossible to judge whether he is gaining by lifting him in your arms. Scales cost about $7.

During the first three days of his life a baby loses about ten ounces. This is as it should be; his body throws off certain waste materials. By the tenth day he should have recovered the weight he had at birth—which averages about eight pounds for boys and seven pounds for girls. After this the breast-fed baby should gain about an ounce a day for the first three months, and at least four ounces a week for the rest of the year.

When a baby must be weaned to the bottle his weight usually remains stationary for a week or ten days, and if any effort is made to strengthen the food so as to fatten him a serious digestive upset is likely to occur. Artificial food must be very weak until the baby's stomach becomes accustomed to it.

At six months of age, if the right formula has been found for his milk, he will have almost caught up with the breast-fed baby, and will weigh about nine pounds more than at birth. These facts indicate how necessary it is to make a daily, or at least a weekly, weighing a part of the routine at bath time.

You will remember that I spoke of borax water, absorbent cotton, and a match. These are used for cleansing the nostrils, the visible portions of the ears, the corners of the eyes, and the mouth. Wet the end of the stick and twist a small piece of absorbent cotton on it. The twist should be very tight and firm, but a loose wad should be left free of the stick at the end. This is wet in the borax water and used very gently to remove dirt from the nostrils and from the creases of the ears, and to cleanse the tongue and gums. Use a fresh piece of cotton for each operation. A piece of cotton thoroughly wet so as not to allow the escape of the fine fuzz may be used to remove sleep from the corners of the eyes. Do not attach this to the stick

Too often it is taken for granted that babies have to be more or less dirty. It ought to be taken for granted that they *must* be clean. Aside from the fact that it is cruelty not to keep them so, the time which is occupied by the daily bath and the washing and airing of garments is paid back to the mother by the health and contentment of the child. Illnesses and fretfulness make larger drains upon time than does the routine of daily baths and washing.

Diapers must be kept dry and thoroughly tubbed after every second use. Repeated "drying out" leaves them in a condition which causes the infant's skin to chafe. A piece of rubber sheeting covered with a folded cloth which can be washed will keep the baby's bed spotless and sweet-smelling. The blankets over him must be clean and used only for him.

A child kept in this way is too comfortable to cry, and too healthy to be ill.

This is the second of a series of articles by Mrs. Keyes on the care of babies. Mrs. Keyes has three robust youngsters of her own, and her husband is a well-known physician, so we place great trust in her. The third article will appear in an early issue.

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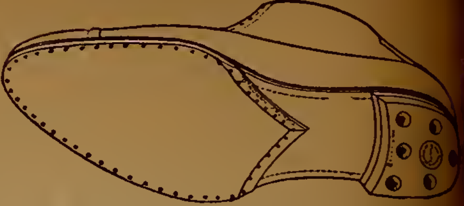

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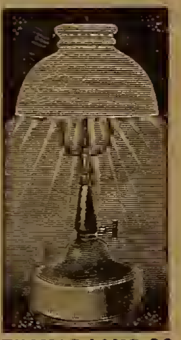

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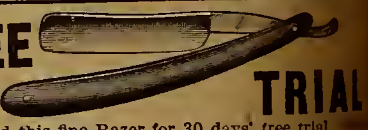

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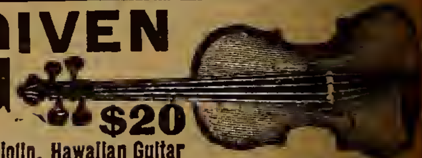

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For Your Boys—and Mine

[CONTINUED FROM PAGE 21]

At this point the clergyman, who had been rummaging in his suitcase, edged his way into the group.

"This is a most commendable idea," he said with a deep and churchly intonation. "At first I feared that I had nothing suitable to—ah—donate, but in going through my things I came upon a package given me by a former parishioner in Glen Ridge, New Jersey, as a gift to my wife."

His donation proved to be a dozen embroidered handkerchiefs. At this point the sour-looking little man came forward bearing three volumes of "Good Cheer for Every Day," bound in white and gold. He had, he explained, written his name within each book as an additional lure to the public.

The discontented woman with the vanity box was gazing out of the window with a bored expression, and as the commercial gentleman looked expectantly in her direction, the dark-haired girl shook her head.

"Nothing doing," she said quietly. "I have an autograph copy of 'My Home in the Field of Honor' that I'll put in. I paid three dollars for it. And a man from New York in the next car gave me a stunning dress shirt and a silk muffler."

"Well, I haven't done a darn thing," said the Harvard boy ruefully. "I've been all this time in the baggage car going through my trunk. I never knew what a lot of worthless junk I've been carting around. The only things worth buying in the whole outfit are a pair of skates and Webster's Collegiate Dictionary."

"Well, now," comforted the commercial gentleman, "that's not bad. What luck did you have, kid?"—turning to the boy in khaki.

"I've half a dozen boxes of cigarettes," said the boy promptly. "I've sworn off. I've smoked enough to-day to last me the rest of my life." The drummer noticed that his face was youthful again, and his eyes bright. "A lady in the second day coach gave me a baby jacket and a paper of safety pins, and a dollar, because she didn't want to take her baby into the crowd at the auction—she seemed to think it would be a regular fight. A college professor back in the smoker gave me his fountain pen and a folding umbrella, and the porter's going to send in his celluloid collar. He says it's never been on but twice, and he'll scrub it up as good as new."

The Harvard boy's eyes sought the Wellesley girl's in a glance of mirth, and the Boston banker sank into the nearest chair and frankly gave way to his glee.

The commercial gentleman, however, looked sober, and at last took the fair-haired girl into his confidence.

"That woman over there," he said, pointing a scornful thumb at the bejeweled lady, "she ain't coughed up a thing. Let's clear this crowd out o' here, and I'll send in that old lady with the knittin' to talk to her. She's got a way with her, and I'd sort o' counted on gettin' a set o' furs out o' that woman. And now," turning to the others, "who'll be auctioneer?"

At his words the clergyman stirred uneasily. In his youth he had hesitated long between the pulpit and the stage, and in his secret soul had never quite stifled his longing for the latter. He arose majestically. This providential moment was not to be despised.

"Might I make bold to suggest," he began in his most ingratiating tone, "that as I am—ah—accustomed, as it were, to public speaking, the rôle of—ah—auctioneer might come more easily to me than to—ah—some others?"

"Good!" exclaimed the Boston man enthusiastically. "I am sure you will impersonate the auctioneer to everyone's satisfaction; and, if agreeable to the managers of this little affair, I—being a banker—will be glad to offer my services as cashier."

IT WAS some fifteen minutes later, the crowd having dispersed to interview every neglected passenger, that an old lady knitting a khaki-colored sweater made her way into the Osceola, and took a seat next to the woman with the vanity box.

"Ain't this cozy?" she remarked cheerfully, ignoring the fact that the other woman had turned away. "I never seen the inside of a Pullman before. You'll have a splendid chance to buy at the auction, won't you? I'm hurryin' to get this sweater off the needles, so's I can donate it. What was your donation?"

The woman shut her lips tightly, but at last whirled her chair about and cried angrily:

"I'm sick and tired of war relief and French wounded, and people knitting. It's just a fad. I don't believe in war, anyway!"

"Well, I don't know as I do either," responded the old lady placidly. "They's a good many things I don't believe in that seem to keep happenin' just the same; an' I s'pose, while they're goin' on, we might as well try and make things easier for them that are sufferin' the most. Maybe you've got someone belongin' to you that's goin', ma'am?"

The woman was opening and shutting her vanity case with nervous fingers. Suddenly she spoke out harshly:

"My boy was drafted. *My boy!* Do you understand? He's going as a *common private!*"

The old lady reached over and patted the nervous hands.

"There, now," she began soothingly, "that's just how Lucy felt at first about Calvin. 'Look at him, Mother,' she says; 'they's no one in the regiment so straight an' tall. He ought to be a captain,' she says. But I told her: 'Land, Lucy, someone's got to be the privates. Might's well be our Calvin as someone else's John; and, so long's he's a *good* private, I don't see as it makes much difference.' After this auction's over, ma'am, I b'lieve I'll start you on a muffler. It'll take up your mind, an' I got a pair o' extra needles in my bag."

As she moved away, the woman turned suddenly and tore a ring from her finger.

"Here, take it!" she said savagely. "What matters a jewel more or less when they've got my boy?"

"That's right, dearie," the old lady said cheerfully. "It'll make you feel better to give somethin', an' this is so pretty 'twouldn't surprise me a mite if it brought in as much as fifteen dollars."

TWO hours later the auction was at its height, and the Pullman Osceola crowded to the doors. The Wellesley girls, assisted by the boy in khaki, had put a number on every article, while the woman doctor and the Harvard freshman had written sketchy descriptions, on which the clergyman elaborated in a manner worthy of the most voluble of auctioneers.

The Boston banker, having begged as cash receiver the tin cracker box in which the porter customarily kept his hairbrush, sat before an improvised table and did his part in a businesslike and efficient way, assisted by the New York millionaire, who, being a jolly good fellow in more ways than one, had appeared promptly on time, leading the two little boys, for whom he procured standing room on a suitcase.

The New York millionaire was buying lightly. His eyes were fastened on article 23—for the New York millionaire knew good diamonds when he saw them. On article 23 he meant to plunge.

There were other eyes that looked longingly at article 23. A boy in khaki was making mental calculations and thinking of the girl he'd left behind him. As the coveted object was put up, and the auctioneer *pro tem.* concluded his florid description, the boy stepped forward and began the bidding at ten dollars.

"Twenty," said the New York millionaire.

"Twenty-five," said the boy in khaki.

"Thirty," said the millionaire.

"Forty," said the boy boldly, though his voice was tense.

"Fifty," said the millionaire.

There was a pause.

"Is this beautiful and costly diamond ring going for only fifty dollars?" pleaded the auctioneer in a voice that would have scandalized his wealthy parishioners. "It tears my heart, ladies and gentlemen, to see this gem sacrificed at such a price. Hasn't anyone a wife, a mother, or a sweetheart—"

"Sixty," said the boy in khaki.

The moment had arrived for which the millionaire was waiting. He enjoyed dramatic moments, and had meant, at just the time when all eyes were fastened on him, to electrify them. In fact, the words "Three hundred" were on his lips. He hesitated a minute to make his effect more startling; but in that minute he felt a pressure against his knee. It came from the hand of the Boston banker, and said as plainly as any words, "Look up." And the millionaire looked for the first time into the face of the boy in khaki.

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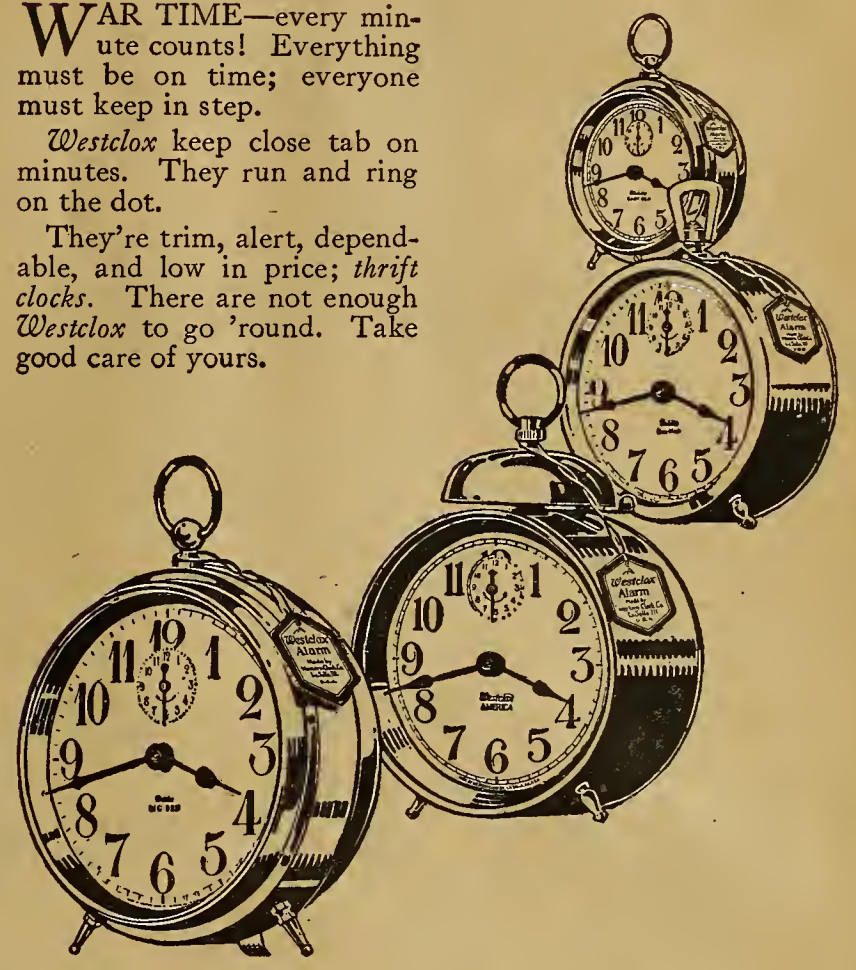

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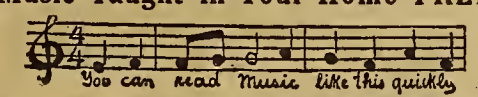

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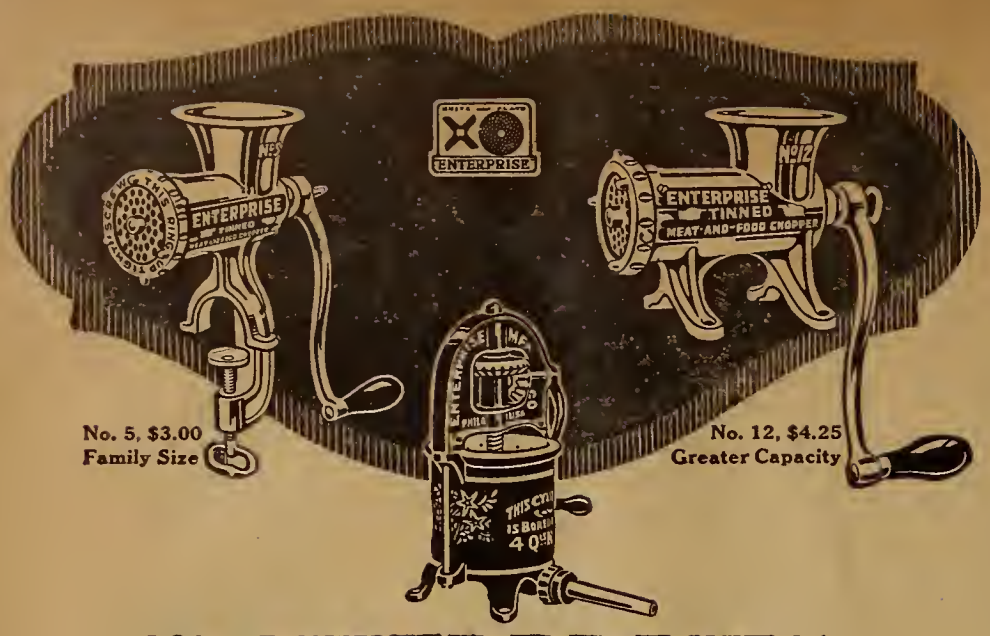

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Size..... Color..... Size.....

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It took but a glance from those keen, world-weary eyes to see the thing that the banker had seen all along, and that a woman with tightly clasped, jeweled hands was seeing too. For it was more than a diamond that the boy was bidding for: it was something beautiful and symbolic—something that a girl would love and dream over; something that would vaguely comfort a woman in those days when the boy in khaki was far away. And the New York millionaire made a little gesture of finality and shook his head as the eyes of the auctioneer sought his.

"Going," wailed the auctioneer pathetically—"this beautiful ring, the gem of our whole collection, going—going—gone, for sixty dollars—to the boy in khaki."

It was then that the New York millionaire plunged. He paid forty dollars for the old lady's sweater, and ten for a toothbrush. He bid five for the conductor's garters, and fifty for the Wellesley girl's crêpe shirtwaist.

It was at the very last that an old man rose from a corner, where he had sat forgotten. He came forward slowly, his hand resting on the chair where sat the Boston banker with his cash box. The auctioneer was holding up the last article to be sold. It was the porter's celluloid collar.

"What am I bid for this useful article, this traveler's joy?" he cried with fervor. "No gentleman's outfit is complete without it. Bid up, gentlemen! Bid up, ladies! A gift that any betrothed would cherish. What am I bid?"

It is safe to say that the clergyman was at last entirely forgotten in the actor.

"Fifty dollars," said the New York millionaire.

There was a burst of laughter.

"Silence!" shouted the auctioneer. "Is this useful and ornamental treasure going for fifty dollars? What am I bid?"

"One hundred," came from the white-haired old figure standing by the cash box.

In a moment all eyes were turned upon him; but it was apparent that he did not see them. He seemed to be gazing at something far, far away.

"Three hundred," said the New York millionaire, who was enjoying every moment.

"Four hundred," said the old man quietly.

Save for the voices of the two men, there was no sound. Even the auctioneer was silent.

"Five hundred," said the New York millionaire.

The old man paused. He seemed to tremble a little, and turned aside as if his work was over; and then a new voice broke the silence. It was the voice of the fat man from the Pullman Geraldine, the man whom the doctor suspected of being a German spy.

"Keep it up, old man!" he shouted. "Keep it up! It's for the boys in the trenches: your boys—and mine!"

And at his words a quiver went through the shrunken frame, and the old man raised his head. He drew in his breath and squared his shoulders; and as he faced them his indomitable spirit shone from his sad old eyes.

"Five thousand dollars!" he said distinctly, looking straight at the astonished auctioneer. "Five thousand dollars, for your boys—and *mine!*"

And it was then that a wild cheer arose in the Pullman Osceola.

THE noon train from New York to Boston saw more than one strange sight that evening. In the last day coach a silken-clad woman sat close to a little gray-haired lady, her jeweled fingers clumsily struggling with the art of knitting. Two seats away a salesman of fine underwear tied up a package containing a gaudy hat-pin and an embroidered handkerchief, which he sent with a long neglected letter to his wife; while farther down the aisle a boy in khaki feasted his eyes on something in his hand that glistened, and dreamed dreams of that time when there shall be no war.

In the Geraldine there was also a change of atmosphere. The woman doctor and a stout gentleman—who only that morning she had thought to be a spy—were holding an intimate and friendly discussion on appendicitis, while the colored porter consulted the Boston banker about investments, and a New York millionaire sat with two tired little boys against his shoulders, trying painfully to cull from his varied and dissipated past stories fit for the ears of little boys.

In the Osceola, the clergyman, having dropped—not without reluctance—the rôle of auctioneer, was indulging in a discussion on *vers libre* with the sour-looking author of "Good Cheer for Every Day." It not until the Wellesley girls, the Harv boy, and the commercial gentleman we mingling in a game of bridge that they alized that the train was bearing the slowly but steadily toward Boston; b their shouts of glee were silenced by t warning hand of the dark-haired girl fro Wellesley.

For at that moment she saw that t old man by the window was fast aslee His head rested against the chair like tired child's, his lips smiled, and from t relaxed fingers resting upon his knee an velope at which he had been staring f long hours dropped to the floor.

The girl rose quickly to replace it. It face up—an unopened letter, addressed the shaky handwriting of an old man, t his dearly beloved and only son "so where in France."

Across the corner, stamped with a r ber stamp, were three words:

"Killed in action."

A 200-Acre Woman Patriot

[CONTINUED FROM PAGE 26]

save her. More than one girl has taken t first step in the wrong way to satisf desire for pretty clothes. Handicraft not all lace-making and basket-weavi Its gift helps to make a good housekee a good gardener or a good cook, and t is what we are all working toward—happy home.

"From a financial standpoint I can say that the work of preparing exhib pays. The same time and energy spen other directions might bring more mo Yet the sensation one feels when the jud passes down the line and awards the pur ribbon must be felt to be appreciated, back of it all—if I can by my exa persuade people to make a living by till the soil, to change that back-yard w patch into a flower garden, to beau their homes with vines and roses, it help to stem the tide which goes to the c where the struggle for existence bre anarchy and war. It is a work which no money measure. Only the Heave Father knows its ultimate value."

It must not be taken from this t Fannie Klinck is not making her own fa pay: she is too practical for that. L July she was to be seen, every day in h vest, running the binder or shocking t oats.

Farmhands were scarce in Iowa th they were answering the draft call. M Klinck might have been able to outbid neighbors and secure the desired help, she is strong, efficient, and ever-willing.

She knew she could do the work of or three hands if she would work hard a long; so she never even made an attem to lure a farmhand away, either from h neighbors or from other work: she r early and worked late, and she did ev bit of work on the 200-acre farm herse

"I have rather enjoyed working in t fields, and do not find it as hard as ho work," she said. "Of course, I have housework to do, too, but it is simple w I am all alone. To eat a sandwich as I on the way to that farther corner of t pasture after the horses, and have no dis to wash, is different from getting a h dinner for a bunch of hungry hired me

"My hardest job was plowing the g den. To pull the walking plow back i corners and plow close to the apple tr without letting the whiffletree bark the is not so easy as it looks, but I did it a never swore nor jerked the horses eit Of course, the long furrows in the fields easy—all but the very last one, when y don't come out even."

All of which goes to prove that Fa Klinck is a philospher as well as a far that when it comes to self-reliance and dependence this Iowa farm woman h enough and plenty to spare. She does brag, she does not preach, but goes o ing her daily work the very best she kn how, seeking ever and always to bec just a little better than she was before, to do things so that her example will h others to do likewise and to do better.

YOU know Bruce Barton's editoria nearly everybody does—and you will interested to learn that hereafter he going to write them for Farm and Fir side. He has one this month. Watch i his second one in the January numbe "The Business of Distributing Medals H Rather Got into a Rut."

The Mystery at Glen Cove

[CONTINUED FROM PAGE 12]

with a narrative of the events which had befallen us since the night before. I censored it judiciously, however, making no mention of the veiled lady I had trailed from the Trevonia.

At length the curiosity of the good people was reasonably satisfied and I was able to secure some light on what had transpired in our absence. As I listened, my own bewilderment grew.

"The mystery is thicker than any I ever read," declared the admiral, chewing thoughtfully on his old briar. "After Steele dragged you away in that sudden flight of yours we brought Carter into the living-room, while a doctor was sent for."

"You were all there, I suppose?"

"No. Agatha remained in the dining-room. What she was doing there is a matter for conjecture. All we know is that we heard her scream, and the lot of us hurried to her. She— Oh, I suppose it was just a case of nerves. We were all pretty jumpy, you know, and—"

"Nerves? I—I don't understand."

The admiral smiled tolerantly.

"She declared she had seen a dark figure running through the shrubbery. I went out immediately with an electric torch and examined the brush, but I could find no broken branches—nothing.

"When we had all cooled down and laughed Agatha out of her fears, we were brought back to remembering Carter by the arrival of Doctor Smedtjen. I took him into the living-room to see his patient. He —he—well, *Carter was gone!*"

"Gone?" I echoed blankly.

"Absolutely. The hardest kind of search failed to reveal a trace of him. He had vanished as completely as if he'd been carried off by a bird. An uncanny thing it was!"

A strange thought entered my mind.

"How long after Carter's disappearance did Agatha go home?" I asked.

"Half an hour, perhaps."

"And how did she behave?"

"Rather peculiarly, I must say—jumping at a sound, and that sort of thing. At times she was almost hysterical."

After some further discussion of other aspects of the mystery I took my leave. A vague suspicion was crystallizing in my mind, upon which I had resolved to act without delay.

I was reasonably sure that Agatha knew the whereabouts of the mysterious Mr. Carter; that, in all probability, she had in some manner been concerned in his disappearance. Then what must have been the steps she had taken?

He was wounded, and, whether for her sake or his, it was evidently imperative that he be kept in concealment. Very well, if I were a woman, with a more or less seriously injured man on my hands, what would I do?

Obviously, I would seek a physician. To insure secrecy my choice would be limited to strangers, and to men, by preference, not too scrupulous. On the other hand, I would feel the natural alarm of the layman, and I would want assistance of some skill and reputation.

A sudden flash of inspiration put the cap on this edifice of deduction. I recalled a conversation with Agatha in which we had discussed the medical fraternity of the Cove, and in which the character of one man had been specifically classified.

AFTER a hurried dinner alone, therefore, I paid a visit to this gentleman. To my carefully calculated questions he was either obtuse or evasive, but when I made casual reference to my very intimate friend, the prosecuting attorney of the county, and displayed a knowledge of the rascal's subterranean habits, his carefully elaborated reserve crumbled away, and he stood before me, pallid and tremulous, filled with the most patent alarm.

"I—I am assured of your discretion?" he stammered.

"You really have no choice as to that," I responded bluntly. "Go on with the story." I was scarcely able to believe that my wild shot had been so successful.

"Well, I received a telephone call late last night, asking me if I was prepared to take a case under rather peculiar circumstances. The fee named was of such magnitude that I could not—I simply *could not* refuse it. I was informed that a motor car would call for me here, and convey me to the patient. The machine came, and I entered it. I was blindfolded by the chauffeur so I could not tell where I was being taken. When we reached our destination the bandage was removed, and I was confronted by a woman."

"And who was she?" I broke in, unable to restrain myself.

"That I cannot tell you," he replied. "She wore a heavy veil over her face and a black domino which completely concealed her figure. I could not even estimate her age."

"What sort of a room did you find yourself in?"

"It was very plainly furnished. I recall a table with an ordinary oil lamp upon it, and a few cheap chairs. On an iron bed, in one corner, lay a young man, fully dressed —at least I assumed he was a young man from his physique. I could not be certain, for his face was also covered. The lady, in a rather agitated voice, directed me to proceed with my work without delay. I made an examination of the patient, discovering that he had been shot almost directly over the heart."

"Yes?"

"The bullet, however, had been deflected by a steel undergarment, entering the body near the shoulder. I probed for it, and extracted it with no great difficulty."

"Have you the bullet?"

"No. The lady insisted upon retaining it."

"You know nothing more than you have told me?" I demanded narrowly.

"Absolutely nothing, I assure you," he replied with every appearance of candor.

"And you have no suspicions as to the identity of either the man or the woman? They dropped no hint of any sort?"

"None whatever."

I LEFT him and returned to my lodgings to consider the possibilities and significance of his amazing story. I was at a loss as to how best to act upon it. My suspicions had been substantiated, it was true, but my program was as indefinite as before. In my helplessness I felt the absence of Steele keenly. His active brain, I was confident, would see a way to utilize the information I had extracted from the physician.

I dropped off to sleep that night resolving that if I heard no word from my companion I would follow up this interesting clue unaided.

But the Fates had other plans for me. While I was at breakfast next morning I received a telegram. It was sent collect, and I tore it open expectantly.

It was from Steele, as I had hardly dared to hope, but its contents left me more in the dark than ever. All it said was:

General Delivery. White Plains. Quick. S.

It was a cryptic message, but two things emerged as reasonably clear—my friend wanted me in White Plains, and he wanted me there without delay. So I lost no time in catching a train which, by transferring at Stamford, would bring me to White Plains within the hour.

Upon arrival I went to the post-office and, hardly expecting any encouragement, inquired if there was a letter for me. The clerk handed me an envelope addressed in pencil, and in the familiar chirography of of my absent friend.

The message, at first glance, seemed utterly without meaning. On a scrap of paper, apparently torn from a notebook, was a jumble of lines which, after some study, I concluded were meant to be a rude map. I pored over it earnestly, hoping that some ray of understanding might penetrate my baffled brain.

One fact gradually dawned upon me: the penciled lines, starting from a square marked "R. R.," seemed to indicate progression. There were no streets named, no explanatory notes of any sort—nothing but a wavering line, continuous except for one small break in which an interrogation point was placed. It twisted and turned, and finally ended at another square, labeled "Careful," heavily underscored.

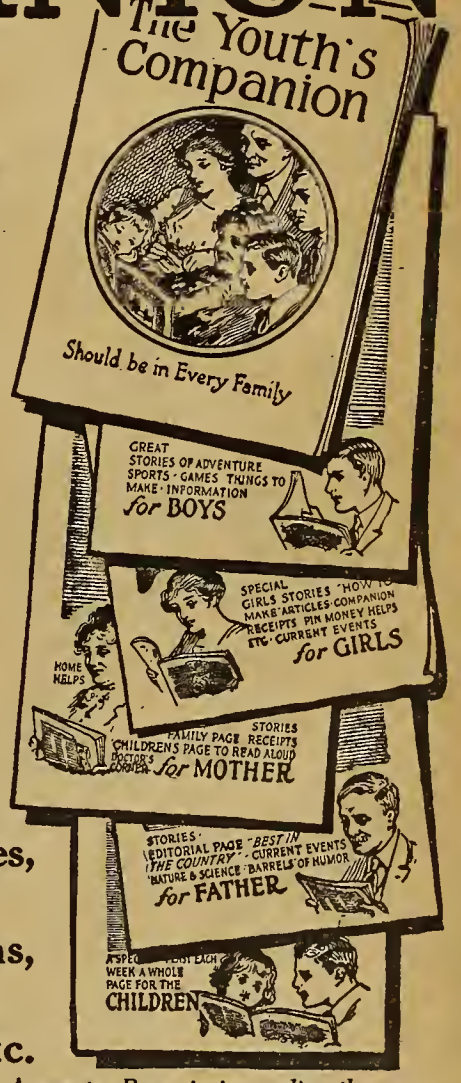
For some time I sat struggling to decipher the singular communication. I was

[CONTINUED ON PAGE 33]

NEW swindlers with new swindles are cropping up amongst us all the time. It's a good idea to keep abreast of them—sort of saves regrets sometimes, you know. That's why we've gathered the latest of their schemes into an interesting article for January under the title "Working Stock Swindles on the Farmer."

The Perfect Christmas Gift for these times—

THE YOUTH'S COMPANION



Never a Christmas like this one.

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Sensible, purposeful giving is the only kind for this Christmas.

Things are not so important as qualities like Cheer and Courage and Comfort.

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In grandma's day many an illness was nipped in the bud by the prompt application of a stinging, burning mustard plaster.

But mother uses Musterole. It has all the virtues of the old-time mustard plaster without the fuss, muss or blister.

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30c and 60c jars; hospital size $2.50.
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Twelve Years a Failure; Twenty a Success

[CONTINUED FROM PAGE 7]

side of the ledger for the first time in twelve years.

But I was learning. I realized that if I was going to be a good farmer I would have no time to be gambling on markets. And while I still store certain of my crops and sell certain others, I never make a practice of playing for the market. If the market is half-way decent when the crop comes in, I sell. If it isn't, and I can do so, I hold.

The lesson I learned from that experience, though, was that I must find some way to have a sure-fire market for my stuff, whether the other fellow did or not. But how? By this time I had got the habit of going and finding out. So I packed my valise and went to New York. There I hunted up the Barclay Street market, where I knew most of the stuff from my part of the country was shipped.

Since then I have made it a rule to spend from a week to two weeks every year personally visiting the men who handle my products. And I have learned to be very careful who they are. I never fool with fly-by-night commission men from firms I don't know, who come breezing into town and quote me a high market to get my stuff. The few times I heeded their siren call I found, when the checks arrived, that the market hadn't panned out nearly so rosily as they had painted it. A good way to get a responsible commission man in a strange town, I have found, is through your banking connections.

One time I went to Washington to attend a meeting of the National Grange. I found that my celery was being shipped to Washington from Baltimore and sold in the markets there in large quantities. I went up to the bank, introduced myself to the vice president, and told him what I wanted.

"I know just the man you want to see," said he. "He is a member of our board of directors, and he'll be in pretty soon. Have a seat."

When the man arrived he put me in touch with one of the best commission men in the city, with whom I closed a deal to ship celery direct to him."

A dishonest commission man handling your stuff in the market can do you more harm among the trade than you would think. I look on them as my personal representatives, and if they're not square the buyer gets the idea that I'm not square.

But to get back to my first visit: I knew no one at the market, and no one knew me. It is very different now, thanks to some of the things I learned on that trip; but at the time the commission men looked on me as more or less of a nuisance. I put on my old clothes and wandered around among them in that little world of truck and fruit, talking to whomever I could get to talk to me. Most of them wouldn't talk, only a few would talk a little, and I had been there a long time before I found a man willing to tell me what I wanted to know. He was a commission merchant whose firm handles the bulk of my stuff in that market today.

"Rogers," he said, "the thing we need more than anything else in this business is an honest pack. We need onions and celery and lettuce and spinach and apples and pears, and everything else that is not only well grown and of superior quality but that is also honestly put up. A square, high-grade product is rare enough with us that our patrons are willing to pay a premium to get it.

"You have no idea how aggravating it is for a man to buy a barrel of apples and pay a top-notch price for them, only to find that he's got fine ones on both ends and bad ones in the middle. The first fellow who comes into this market and establishes his reputation with an honest pack is a made man."

That was enough for me. I went home. I knew what the market wanted, and I knew how it wanted it. And let me say right here that that man had stated one of the soundest fundamental principles of business. It can be applied to any branch of farming, or to any other line of business. It was just his way of saying in different words that honesty is the best policy. It is just as poor business to give a dishonest pack in a horse trade or a load of corn or a necktie or an international treaty as it is in a barrel of apples or a bushel of carrots.

Well, you ask, how did it work out? Simply like this: The things I produce today command from 25 to 50 per cent above the market wherever I choose to sell them. People know that when they buy a barrel of apples from me it is a uniformly good barrel of apples all the way through. They know that in paying the higher price they are saving money because they are taking no chances on what's in the middle of the barrel. They also know that if there does happen to be anything wrong with anything they get from me it will be made good without argument or question.

I happened to be in the New York market one day not long ago when a merchant came down to order a supply of fruit and truck. This was the conversation I heard.

"Got any Diamond WPR apples?"

"Why, I've got some mighty good apples here, but no Diamond WPR's. Better let me send you up some of these."

"When you gonna have some Diamond WPR's?"

"Oh, to-morrow or next day."

"All right, send me up a couple of barrels when they come."

Of course that was music to my ears, but when I remembered the years and the work it had taken me to get that merchant to talk like that I didn't sit up any over it. I had built my business from the ground up and I was entitled to that recognition. The merchant didn't say "happen" to like my apples.

The trade-mark mentioned is about the most valuable thing I have. It was the mark I decided on to make my stuff stand apart from that of everyone else. I had struggled unremittingly to make it spell honest pack and unsurpassed quality in the mind of the buying public. It took years and strict attention to business to do it, but to-day it is worth many times what I put into it.

I honestly believe that if I had my choice of losing the world's good opinion of my trade-mark or all the property I possess I would think a long time before I gave up the trade-mark. Why? Because I could accumulate more property, but a good name once besmirched in business is a thing utterly lost.

Other growers didn't pay much attention to what I was about in the three or four years I was building that trade-mark. They didn't see the barrels and barrels of stuff I cast aside in making my pack. They had no way of knowing that, instead of mixing the fairly good and the poor with the best, I was putting the fairly good in a barrel marked fairly good, which did not bear my trade-mark. Nor did they notice that when I had a better crop of a certain thing there was more Diamond WPR of that particular product on the market that season.

When merchants began talking like the one I spoke of a moment ago, and when commission men began to pay a premium for stuff bearing my mark they took notice. In fact, there came a time when some of them paid me the doubtful compliment of suggesting that I put their products and pack them under my trade-mark. Needless to say this was never done.

But don't think that I hold a monopoly on trade-marks. They are free for the

"This is the house Mrs. Rogers and I built at Williamson. Needless to say, it was built after the twelfth year of truck and fruit farming"

"Of course, picking the fruit off the trees looks pretty simple, but growing it on them so it can be picked off at a profit isn't so easy sometimes"

[CONTINUED ON PAGE 34]

Woodrow Wilson—Human Being

[CONTINUED FROM PAGE 15]

and I am sure it will be of use to me in making up my mind upon this matter. Thank you. Good day."

This is all in the early afternoon. About four o'clock the President goes for a drive with Mrs. Wilson, or for a horseback ride. He likes to get out of the city and make his way between growing fields through the hills and valleys of Maryland or Virginia.

The President always dresses for dinner. I don't mean he puts on a dress suit, but he likes to come to the table in fresh apparel. In the summer it is either a white pongee or mohair suit, and in the winter a dark blue or a black worsted.

Between seven and ten o'clock, if not otherwise engaged at a reception or a theater party, the President likes to sit at home with Mrs. Wilson and other members of his household and read, or play solitaire. He is an ardent devotee of the game known as Canfield, and when he is thinking about some particularly important problem he has been known to play it by the hour. If he doesn't do this, he likes to read aloud while Mrs. Wilson knits. Mrs. Wilson does Red Cross and other relief work from morning till night. She is a splendid needlewoman. But no matter what he is doing, nor how deeply interested he is in it, at ten o'clock Mr. Wilson goes to bed. If he goes to the theater one night and doesn't get in until ten-thirty or eleven, he goes to bed that much earlier the next night to make it up.

Occasionally the President is compelled to attend an official reception. But if you expect to catch him at one of these, don't make the mistake that a certain New York society matron made. She went to Washington with a card to a reception at the Pan-American Union Building, all primed and cocked to meet the President and Mrs. Wilson. The night of the great event she came rolling up to the hall in her high-powered limousine, wearing enough diamonds to shame a headlight. She came late intentionally, thinking she would do the proper thing and not precede the Presidential party there. Into the hall she bounced, and looked around, but failed to find the President. He and his wife had gone home.

He is a very human being, is the President. Very democratic and very simple in his ways and in his wants.

And as for his fortune—well, you know the President is Scotch, and he will conclude his eight years at $75,000 a year one of these days. His house is given him rent-free. He is a shrewd investor, owning a variety of very sound stocks and bonds, including more than his share of Liberty bonds, and some farms and real estate. I have tried to figure where his expenses could possibly run more than $15,000 or at most $20,000 a year, and I can't do it. So I leave you to draw your own conclusions.

ARE you a real farmer at heart? Do you farm because you love farming? Or is it drudgery to you? S. J. Lowell, Master of New York State Grange and a very successful farmer, tells next month why he used to hate farming and why he loves it now. His is a real message.

The Mystery at Glen Cove

[CONTINUED FROM PAGE 31]

annoyed at myself for being so wretchedly obtuse. Then, like a thunderbolt from heaven, the meaning of that baffling "R. R." flashed upon me! What else could it mean but "Railroad Station"?

I hurried back, the crude little chart in my hand. Sure enough, a street stretched away from the station exactly as indicated in that diagram. Certain, now, that I had discovered the key, I set out. For a time I had no difficulty. The streets appeared according to specifications, and I hurried along untroubled.

But when I reached the break in the line, marked with an interrogation point, I was obliged to halt. The road forked in three directions. I could not tell which was the right one, and, apparently, the maker of the map had been troubled with the same difficulty.

The only thing to do, I decided, was to try the three roads successively, until I had again picked up the thread in the chart. This I forthwith proceeded to do. And, as if to recompense me for my previous tribulations, Fate decreed that I should be successful on the first essay. Without further hitch or hesitation I picked up the lost line, and went on until I reached the spot which marked my goal, designated in the single pregnant word, "Careful!"

My destination was unmistakable. It was a small frame cottage, well concealed with thick foliage. The only sign that the house was not deserted was a frail whisp of smoke straggling up from a chimney at the rear.

I halted irresolutely. It was all very well to be urged to caution, but what did "caution" *mean?* I scratched my head helplessly. If only he had given me just an inkling!

THE problem was promptly taken out of my hands. Someone came out of the shrubbery. I halted, my heart thumping. I could not be mistaken. It was the man whose inexplicable pursuit I had eluded in Harlem!

"Good morning," he said pleasantly. "Were you looking for someone?"

"Oh, no," I replied. "I was just taking a stroll. I—er—live up the road a bit."

He surveyed me thoughtfully.

"I see" he said. "You are not a good liar," he added after a pause. "You're a pretty good trailer, though." He knitted his brows in perplexity. "I don't see how the dickens you— But never mind—that isn't the point."

"I trust I am not unduly inquisitive, but might I ask—what is the point?"

He smiled quizzically.

"It's a warm day, isn't it?"

"Quite," I snapped shortly, turning on my heel and walking away. With some further banality concerning the temperature he suited his step to mine and fell in beside me.

"You appear to enjoy walking on warm days," I observed sarcastically.

"On the contrary," he replied. "But I enjoy your company."

"Suppose I were to decide to walk back to the town?" I inquired, puzzled by the singular behavior of my companion.

"If you were to make such a whimsical decision," he said calmly, "I should make an effort to—to—dissuade you."

"And if I were to summon a vehicle?" I queried.

"You couldn't."

"And why not?"

"Because I shouldn't let you." The ominous words were uttered quite calmly. I began to feel that Steele's warning to be cautious, though hardly helpful, had not been offered aimlessly.

"I am to understand," I said, "that you consider me your prisoner?"

"Your intuitions are quite correct."

"Suppose I were not as docile as you appear to think I am? Suppose I—"

"It would be unwise."

"One more question, then. While subject to your tender mercies, I am to stay —where?"

He jerked his thumb toward the little house.

"You'll find it not uncomfortable."

"I see. Well, we understand each other so far. Now, then, who are you, why did you pursue me before, and why is my company so desirable now?"

He surveyed me for a moment in serious silence. Then a grin spread slowly over his bronzed and not unattractive features.

"Three very leading questions, sir, which I cannot answer."

"You mean you *will* not?"

"No, sir; I *cannot*. I"—he hesitated a moment—"I am under orders."

"You realize, I suppose," I suggested coldly, "that as a lawyer I am fully cognizant of the illegal, if not actually criminal, character of your threats?"

For reply his grin grew broader and he spat imperturbably into the dust of the road. Then, with a quick gesture, he threw back the lapel of his coat.

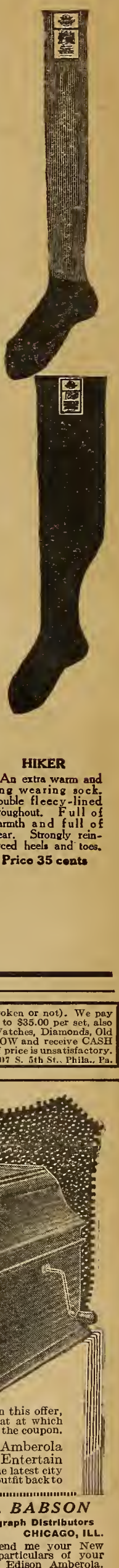
"You're not dealing with the village constable, old man," he murmured softly.

I recoiled sharply, and my heart pounded with a sudden excitement. *I was in the custody of the United States Secret Service!*

[CONTINUED IN JANUARY NUMBER]

IF YOU think all these new American ships we're building don't mean anything to the farmer, just read the article in the January number by Chairman Hurley of the Shipping Board. He has a real message for you—one which directly concerns your pocketbook.

Three of the fine values in Durable-DURHAM Fleecy-lined Hosiery



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92—and She Ran Away!

Some folks are old at twenty; some are young at ninety: it is a question of spirit, not of years.

Worry and inefficiency—not "knowing how" to do things—that's what ages us. Keep step with progress in the world of Personal Health, Household Affairs, Business Life, and you will be as young at ninety, if you live that long, as you are at twenty.

Margaret Deland found an old woman, ninety-four years of age, sitting beside the road in France. At 92, her indomitable spirit unquenched by time, she ran away from her home and wandered with other refugees over the country behind the lines, waiting for the Hun to be driven back. She knew he would be. Now he has been, and the old woman can go home.

It is the *Woman's Home Companion*, in the January number of which Mrs. Deland tells the story of the aged Frenchwoman, that *keeps* you young, as it *finds* you. Its pages inspire, with their peculiarly human, personal, helpful touch. It is unlike any other woman's magazine in the world.

WOMAN'S HOME COMPANION

THE CROWELL PUBLISHING CO.

WOMAN'S HOME COMPANION
THE AMERICAN MAGAZINE
FARM AND FIRESIDE

Twelve Years a Failure; Twenty a Success

[CONTINUED FROM PAGE 32]

taking. Any man who wants to apply the necessary honesty and effort to the job can build just as good a trade-mark as mine, or as any one of dozens of others—maybe better. It doesn't make any difference what your business is, either. You can trade-mark yourself as a good farmhand or as a carpenter. You can trade-mark your horses, or your cows, or your hogs, or your sheep, or your corn. A good trade-mark on anything spells honesty and quality.

And don't be impatient if folks don't recognize the worth of your product as soon as you think they ought to. I wasted a lot of unnecessary time worrying about that. After I had fought along for a couple of years trying to get my brand established, I happened to be in the market one day when a commission man's customer had a choice between some of my apples and some of another man's.

Both brands were trade-marked, and I knew that mine were every bit as honestly packed and of slightly better quality than his. But the merchant chose his. I went home feeling pretty bad. But after I figured it out I saw his side of it. My pack was newer on the market. The other man's was old established. The merchant wasn't quite so sure of my stuff as he was of the other man's, so he paid $1.50 a barrel more and took his. But when I thought of it, instead of discouraging me, the incident merely strengthened my confidence in the value of a good trade-mark, and I went right ahead working for it harder than ever. To-day my pack stands on an equal footing with that of the man whose product beat me out of the sale.

I want to say a word to those farmers and business men who have had as much or more success than I have. There is a tendency on the part of some of them to be stingy about giving young fellows the benefit of their experience. It seems to me that a man who acts that way is either narrow-minded or mean. Perhaps I can best illustrate my point by telling you something that once happened to me:

ONE day after I had found out how little I really knew about my business, and was going around studying other men and methods, I happened to visit a celery grower who had been very successful. He was pleasant enough until he found out that I was thinking of growing celery. Then he shut up like a clam, and indicated very plainly that he would like to have me go away from there. But I didn't take the hint.

"Well," I said," if you won't tell me anything, do you have any objections if I go down where the men are working and look around, provided I don't ask any questions?"

Evidently he had little fear of what I might observe, or else he thought that was the best way to get rid of me. At any rate he said I could. Before I left I went back and asked him point-blank why he didn't want to tell me how he grew celery.

"Because," he said, "you'll grow just as good celery as I do, and spoil my market."

What nonsense! I didn't argue it with him, but I want to say to any man who has that idea now that the more and better celery or horses or oats or anything else that is grown in a locality, the better the market is going to be in that locality, and the higher the prices realized. It stands to reason—doesn't it?—that if there are a hundred carloads of first-class celery in a district the market man is apt to send a representative to bid on it, whereas if there is only one carload it isn't worth his while paying traveling expenses on. That has been my experience.

However, I hope no one will get the idea that going around among successful men and fashioning your work after them is attended by unalloyed benefits. You've got to take care what thunder you steal, and be very sure there isn't a flash of lightning behind it that will knock your plans cold. It was only a few years ago, long after my initial success, that I got a lesson in that I shall never forget. I realize n that if I had followed my original plan and studied my own land as carefully as I studied the other fellow's I would have saved myself several years' work and several thousand dollars.

There was a man near Kinderhook, New York, by the name of L. L. Morrell, who had had wonderful success growing Kieffer pears. They were unlike any Kieffers w had ever seen around Williamson—b and fine. We envied them, and thought w would try to grow some of the same kin I was among those who went to Morrell place to see how he did it. I made sever trips, because I had come to be a gre believer in first-hand information. And will say for Mr. Morrell that he gave m all the help he could. There was nothing narrow about him.

I found that one of the most importa things he did was to prune his trees do to two buds. That, with the other poin in his system, gave him those wonderf pears for which he was getting $1.50 $2 above the market.

The upshot was that I came home a set out 24 acres of Kieffers. When the ti was right I pruned them down to a fe buds and otherwise followed Morrell's i structions, then sat back secure in the be lief that I was going to have a splendid cr of elephant pears. But somehow I did get the crop. The trunks and the leav and the branches of those trees grew mag nificently, but there were no pears. Th next year I tried again, and got anothe beautiful crop of wood and leaves. De termined not to give up, I struggled alon with that 24-acre orchard every year f several years, each year trying to find o what the trouble was, and each year grow ing a perfect forest of wood and leaves but no pears.

At last I found the hole in the found tion. I discovered what had been as pla as the nose on your face all along, whic was that Morrell could prune his trees dow to two buds and grow pears of great size and quality because his land wasn't as rich as mine, whereas I could prune mi down to two buds and grow nothing b wood because my land flooded the tree themselves with growing energy and le the buds to starve. So, after several year boggling, I quit pruning those trees, a for two years now they have been doing well and I am beginning to get pears.

If I had paid close attention to my ow land and found out whether it was fitt to grow pears Morrell's way, I would hav been better off. I repeat, I don't think is possible for a man to know his own far too well. One thing at which I have mad a good deal of money has been buying farms whose owners didn't appreciat what kind of land they had. I have taken hundreds of acres of such land, developed it along the right lines, and sold it at a profit.

For example, I bought a rather unpromising 114 acres from a certain man for $8,000. He had been working it as a general farm without much success. Among other things he had 15 acres of muck. He hadn't paid much attention to it. I took the place and concentrated my attention on that muck, forgetting all about the general farming. I developed every acre of it, and for eight years I worked it for all it was worth, making a good profit. At the end of that time I sold the place for $30,000.

THE great trouble with most of us farmers is that we want to grow what we wan on our land. We are not inclined to let the land say anything about it. But the land will say something about it. It will grow what it is fitted to grow, and nothing else. Find out first what your land wants to grow, and grow that, even if it is nothing but hens.

Another point: I grow a variety of things. There is a very sound reason for that. My specialties are lettuce, celery, onions, spinach, apples, and carrots. It is almost certain that they can't all fail the sa year. If I lose on one I make on anoth Celery has always been a good payi crop for me. Lettuce hasn't been so good. But there never has been a year, since I have had any success at all, that I haven' mad[illegible] on something.

The[illegible] have, in brief, the bas[illegible] of my success, such as it is. [illegible] you any, I am glad; if they do not, this article was not worth my writing nor your reading. But I hope and believe that there are some things written here which any man can profitably apply to his own struggle toward success, no matter what he is doing. But don't forget that you must *build* it. It will never just happen.

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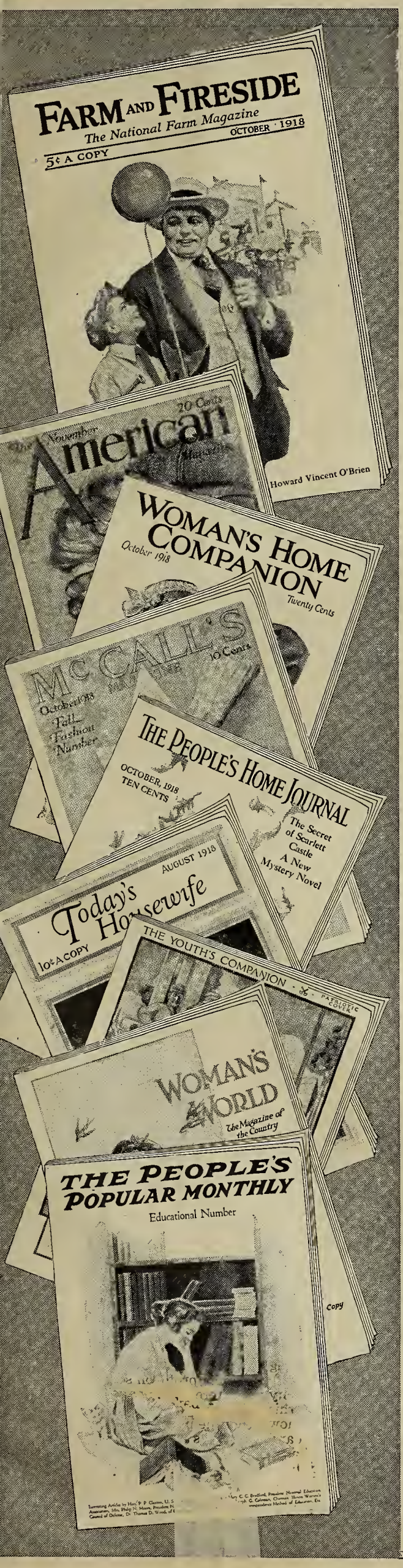

BY ORDER of the United States Government, publishers must greatly curtail the amount of paper used in printing of magazines. This is a war measure and is being closely complied with by every patriotic publisher. If you intend to subscribe for magazines this season, *Do It NOW*—as the number of subscriptions that can be accepted is limited. We offer below the best and most popular magazines at exceedingly attractive prices.

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